

AIR QUALITY PERMIT

Issued To: Owens & Hurst Lumber Co., Inc. Permit: #2908-01
P.O. Box 1316 Administrative Amendment (AA) Request
Eureka, Montana 59917 Received: 12/19/03
Department Decision on AA: 06/17/04
Permit Final: 07/03/04
AFS: #053-0001

An air quality permit, with conditions, is hereby granted to Owens & Hurst Lumber Co., Inc. (Owens & Hurst), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Owens & Hurst owns and operates a sawmill and planing mill facility located near Eureka, Montana. The legal description of the facility location is the Southwest $\frac{1}{4}$ of the NorthWest $\frac{1}{4}$ of Section 2, Township 36 North, Range 27 West, in Lincoln County, Montana. A complete list of the permitted equipment is contained in Section 1.A of the permit analysis.

B. Current Permit Action

On December 19, 2003, the Department of Environmental Quality – Air Resources Management Bureau (Department) received letters from Owens & Hurst, as well as Lone Pine Timber Industries, Inc. (Lone Pine), notifying the Department that Owens & Hurst had purchased Lone Pine. In addition, Owens & Hurst requested the Department to administratively amend Montana Air Quality Permit (Permit) #2908-00 (sawmill) to include the equipment and conditions contained in Permit #2970-01 (planing mill) because the facilities are located on the same property and are now under the control of the same owner. The current permit action administratively amends Permit #2908-00 to include the equipment and conditions of Permit #2970-01. The Department will revoke Permit #2970-01 after Permit #2908-01 becomes final. In addition, the current permit action adds an additional cyclone (Mill Sawdust Cyclone) to the permit according to the provisions of ARM 17.8.745.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Sawmill production shall be limited to 153-million board feet per year (ARM 17.8.749).
2. Planning mill production shall be limited to 100-million board feet per year (ARM 17.8.749).
3. Owens & Hurst shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).

4. Owens & Hurst shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
5. Owens & Hurst shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Owens & Hurst shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

In addition, Owens & Hurst shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

- a. Planing Mill production in million board feet per year; and
 - b. Sawmill production in million board feet per year.
2. Owens & Hurst shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by Owens & Hurst as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Owens & Hurst shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Owens & Hurst fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Owens & Hurst of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department’s decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Owens & Hurst may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis
Owens & Hurst Lumber Co., Inc.
Permit #2908-01

I. Introduction/Process Description

A. Permitted Equipment

Owens & Hurst Lumber Co., Inc. (Owens & Hurst) owns and operates a sawmill and planing mill facility located near Eureka, Montana. The legal description of the facility is the Southwest ¼ of the Northwest ¼ of Section 2, Township 36 North, Range 27 West, in Lincoln County, Montana. Equipment at the facility includes, but is not limited to, the log yard, the sawmill, a chipper, 2 planers, a molder, bins for storing hogfuel, sawdust, chips, and shavings, cyclones on pneumatic transfer systems and fugitive emissions from the milling operations.

B. Source Description

The sawmill removes bark (debarks) from trees and saws the trees into random length rough lumber. The rough lumber is then sent to the planing mill where the rough lumber is planed and trimmed to product specifications.

C. Permit History

On August 10, 1971, Montana Air Quality Permit (Permit) #342 was issued to Owens & Hurst (formerly Kennedy-Stephans Lumber Company, Inc.) for controls on an existing tepee burner. During the spring of 1994, while determining which Montana facilities were subject to the Title V Operating Permit Program, Owens & Hurst notified the Department of Environmental Quality (Department) that the tepee burner had not been operated since 1981 and that the tepee burner had been removed from the premises. Therefore, the Department revoked Permit #342.

On December 28, 1994, the Department sent Owens & Hurst a letter notifying Owens & Hurst that the Department had completed an emission inventory for the sawmill. The Department informed Owens & Hurst that the sawmill facility was no longer subject to the Title V Operating Permit Program; however, Owens & Hurst was required to submit a Montana Air Quality Permit Application (application) because the facility had the Potential to Emit (PTE) greater than 25 tons per year of particulate matter.

On December 18, 1995, the Department received an application from Owens & Hurst for the existing sources of emissions located at the sawmill. Permit #2908-00 was issued final on April 17, 1996.

While reviewing Application #2908-00, the Department discovered that the planing mill was owned by Lone Pine Timber Industries, Inc. (Lone Pine), not Owens & Hurst. Therefore, the Department calculated the PTE of the planing mill and on July 10, 1996, the Department notified Lone Pine that a permit was required because the planing mill had the PTE greater than 25 tons per year of particulate matter.

On September 3, 1996, the Department received an application from Lone Pine for the planing mill facility. Permit #2970-00 was issued final on November 23, 1996.

On November 2, 1999, the Department received a letter from Lone Pine requesting the Department to change the production from the planing mill from 50-million board feet per year to 100-million board feet per year. The planing production limit change was incorporated into the permit according to the provisions of the Administrative Rules of Montana (ARM) 17.8.705(1)(r). Permit #2970-01 became final on December 16, 1999, and replaced Permit #2970-00.

D. Current Permit Action

On December 19, 2003, the Department received letters from Owens & Hurst, as well as Lone Pine, notifying the Department that Owens & Hurst had purchased Lone Pine. In addition, Owens & Hurst requested that the Department administratively amend Permit #2908-00 (sawmill) to include the equipment and conditions contained in Permit #2970-01 (planing mill) because the facilities are located on the same property and are now under the control of the same owner. The current permit action administratively amends Permit #2908-00 to include the equipment and conditions of Permit #2970-01. In addition, the current permit action incorporates an additional cyclone (Mill Sawdust Cyclone) into the permit according to the provisions of ARM 17.8.745. Permit #2908-01 replaces Permit #2908-00 and Permit #2970-01. The Department will revoke Permit #2970-01 after Permit #2908-01 becomes final.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARMs and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Owens & Hurst shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Owens & Hurst must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Owens & Hurst shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions—Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions—Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Owens & Hurst was not required to submit a permit application fee for the current permit action because it is an administrative action.
2. ARM 17.8.505 When Permit Required—Exclusions. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits—When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the PTE greater than 25 tons per year of any pollutant. Owens & Hurst has a PTE greater than 25 tons per year of particulate matter and particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits—General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units—Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Owens & Hurst was not required to submit a permit application for the current permit action because it is an administrative action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Owens & Hurst was not required to submit an affidavit of publication of public notice for the current permit action because it is an administrative action.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The BACT analysis is discussed in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Owens & Hurst of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
 2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2908-01 for Owens & Hurst, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.

- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is not subject to any current NSPS.
- e. This facility is not subject to any current NESHAP standards.
- f. This source is not a Title IV affected source, nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Owens & Hurst will be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or altered source. Owens & Hurst shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. However, a BACT analysis was not required for the current permit action because the current permit action is considered an administrative action.

IV. Emission Inventory

Source	Tons/Year					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
Log Debarking	5.67	3.12	-----	-----	-----	-----
Log Sawing	11.34	6.24	-----	-----	-----	-----
Planer Cyclone	8.76	3.50	-----	-----	-----	-----
Resaw Cyclone	8.76	3.50	-----	-----	-----	-----
Woods Planer Cyclone	8.76	3.50	-----	-----	-----	-----
Yates Planer Cyclone	8.76	3.50	-----	-----	-----	-----
Mattison Molder Cyclone	8.76	3.50	-----	-----	-----	-----
Mill Sawdust Cyclone	8.76	3.50				
Planer Shavings Loadout	10.25	3.73	-----	-----	-----	-----
Chip Loadout	0.62	0.21	-----	-----	-----	-----
Vehicle Fugitives	12.30	5.54	-----	-----	-----	-----
Totals	92.74	39.84	0.00	0.00	0.00	0.00

Log Debarking

Lumber Production: 153 MMbf (Company Information)
 Tons of Logs Processed: 153 MMbf * 3706 ton/MMbf = 567,018 ton/yr

PM Emissions

Emission Factor: 0.02 lb/ton (AFSSCC 3-07-008-01, pg 143)
 Calculations: 0.02 lb/ton * 567,018 ton/yr * 0.0005 ton/lb = 5.67 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.011 lb/ton (AFSSCC 3-07-008-01, pg 143)
Calculations: 0.011 lb/ton * 567,018 ton/yr * 0.0005 ton/lb = 3.12 ton/yr

Log Sawing

Lumber Production: 153 MMbf (Company Information)
Tons of Logs Processed: 153 MMbf * 3706 ton/MMbf = 567,018 ton/yr

PM Emissions

Emission Factor: 0.04 lb/ton (Process Knowledge)
Calculations: 0.04 lb/ton * 567,018 ton/yr * 0.0005 ton/lb = 11.34 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.022 lb/ton (Process Knowledge)
Calculations: 0.022 lb/ton * 567,018 ton/yr * 0.0005 ton/lb = 6.24 ton/yr

Planer Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: 2.00 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.76 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: 0.80 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.50 ton/yr

Resaw Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: 2.00 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.76 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: 0.80 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.50 ton/yr

Woods Planer Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $2.00 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 8.76 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $0.80 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.50 \text{ ton/yr}$

Yates Planer Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $2.00 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 8.76 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $0.80 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.50 \text{ ton/yr}$

Matson Molder Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $2.00 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 8.76 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $0.80 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.50 \text{ ton/yr}$

Mill Sawdust Cyclone

Hours of Operation: 8760 hr/yr

PM Emissions

Emission Factor: 2.00 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: $2.00 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 8.76 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.80 lb/hr (AFSSCC 3-07-008-08, pg 144)
Calculations: 0.80 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.50 ton/yr

Planer Shavings Loadout

Production Rate: 100 MMbf/yr (Permit Limit)
Planer Production: 621 ton/MMbf (Department Information)
Calculation: 100 MMbf/yr * 621 ton/MMbf = 62,100 ton/yr

PM Emissions

Emission Factor: 0.33 lb/ton (FIRE Version 5.0, SCC 3-07-008-03)
Calculations: 0.33 lb/ton * 62,100 ton/yr * 0.0005 ton/lb = 10.25

PM₁₀ Emissions

Emission Factor: 0.12 lb/ton (FIRE Version 5.0, SCC 3-07-008-03)
Calculations: 0.12 lb/ton * 62,100 ton/yr * 0.0005 ton/lb = 3.73

Chip Loadout

Production Rate: 100 MMbf/yr (Permit Limit)
Chip Production: 411 ton/MMbf (Department Information)
Calculation: 100 MMbf/yr * 411 ton/MMbf = 41,100 ton/yr

PM Emissions

Emission Factor: 0.03 lb/ton (assume 10% of wood waste loadout)
Calculations: 0.03 lb/ton * 41,100 ton/yr * 0.0005 ton/lb = 0.62

PM₁₀ Emissions

Emission Factor: 0.01 lb/ton (assume 10% of wood waste loadout)
Calculations: 0.01 lb/ton * 41,100 ton/yr * 0.0005 ton/lb = 0.21

Vehicle Fugitives

Miles Traveled: 8,200 mile/yr (Company Information)

PM Emissions

Emission Factor: 6 lb/VMT (Department Information)
Control Efficiency: 50% (Water)
Calculations: 6 lb/VMT * 8,200 mile/yr * 0.0005 ton/lb * (1-0.5) = 12.30 ton/yr

PM₁₀ Emissions

Emission Factor: 2.7 lb/VMT (Department Information)
Control Efficiency: 50% (Water)
Calculations: 2.7 lb/VMT * 8,200 mile/yr * 0.0005 ton/lb * (1-0.5) = 5.54 ton/yr

V. Existing Air Quality

The Owens & Hurst facility is located in the Southwest ¼ of the Northwest ¼ of Section 2, Township 36 North, Range 27 West, in Lincoln County, Montana. The town of Libby and the surrounding area within Lincoln County is designated as a nonattainment area for the National Ambient Air Quality Standards for PM₁₀.

VI. Ambient Air Impact Analysis

The Owens & Hurst Facility is located approximately 30 air miles from the nearest Libby PM₁₀ nonattainment area boundary. The current permit action will not affect the immediate surrounding area or the Libby nonattainment area because emissions from the facility are not being increased.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Montana Environmental Policy Act

The current permit action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Dave Aguirre

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