

## Air Quality Permit

Issued to: Sun Mountain Lumber, Inc. 1303 Kentucky P.O. Box 389 Deer Lodge, MT 59722	Permit #2634-09 Administrative Amendment (AA) Received: 04/05/04 Department Decision on AA: 07/14/04 Permit Final: 07/30/04 AFS #077-0002
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An air quality permit, with conditions, is hereby granted to Sun Mountain Lumber, Inc. (Sun Mountain) 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

The Sun Mountain facility is located at 1303 Kentucky on the southern edge of Deer Lodge, Montana. Universal Transverse Mercator (UTM) coordinates for the facility are Zone 12, easting 366.4 kilometers, and northing 5138.4 kilometers. The legal description of the site is the SW<sup>1</sup>/<sub>4</sub> of Section 4, Township 7 North, Range 9 West, Powell County, Montana. A list of the permitted equipment is located in the Permit Analysis.

#### B. Current Permit Action

On April 5, 2004, the Department of Environmental Quality (Department) received a letter from Louisiana-Pacific Corporation (L-P) requesting an administrative amendment to Permit #2634-08 to change the corporate name on the permit from L-P to Sun Mountain. The current permitting action changes the corporate name on Permit #2634-08 and updates the permit to reflect current permit language and rule references used by the Department. Permit #2634-09 replaces Permit #2634-08.

### SECTION II: Limitations and Conditions

#### A. Emission Limitations

1. Sun Mountain shall not cause or authorize to be discharged into the outdoor atmosphere, from the Hurst hog fuel-fired boiler, Particulate Matter (PM) emissions in excess of 0.30 pounds per million British thermal unit (lb/MMBtu) (ARM 17.8.752).
2. Sun Mountain shall not cause or authorize to be discharged into the outdoor atmosphere from cyclones on pneumatic transfer systems installed after November 23, 1968, any visible emissions in excess of 20% opacity, averaged over 6 consecutive minutes (ARM 17.8.304(2)).
3. Sun Mountain shall not cause or authorize to be discharged into the outdoor atmosphere from cyclones on pneumatic transfer systems installed prior to November 23, 1968, any visible emissions in excess of 40% opacity, averaged over 6 consecutive minutes (ARM 17.8.304(1)).

4. Sun Mountain shall apply water and/or other dust suppression agents to the general work area, log decks, rough lumber storage area, haul roads, and access roads as necessary to control fugitive emissions. If inspection demonstrates non-compliance with the 20% opacity standard, the Department may require a mandatory application schedule for water and/or other dust suppression agents (ARM 17.8.749).
5. Sawmill production shall be limited to a maximum of 200 million board feet (MMbf) during any rolling 12-month time period (ARM 17.8.749).

B. Testing Requirements

1. Sun Mountain shall conduct a performance source test on the Hurst hog fuel-fired boiler for PM and demonstrate compliance with the limit in Section II.A.1 within 180 days of issuance of Permit #2634-08. Testing shall continue on an every-5-year basis, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.340 and ARM 17.8.749).
2. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Sun Mountain 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 most recent Emission Inventory report and sources identified 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 (ARM 17.8.505).

2. Sun Mountain 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. Sun Mountain shall document, by month, the total sawmill production in MMbf/year. By the 25<sup>th</sup> day of each month, Sun Mountain shall total the sawmill production during the previous 12 months to verify compliance with the limitation in Section II.A.5. A written report of the compliance verification shall be submitted along with the annual Emissions Inventory (ARM 17.8.749).

4. All records compiled in accordance with this permit must be maintained by Sun Mountain 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 – Sun Mountain 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, Continuous Emission Monitory Systems (CEMS) or Continuous Emission Rate Monitory Systems (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 Sun Mountain fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Sun Mountain 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 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 Sun Mountain may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Permit Analysis  
Sun Mountain Lumber, Inc.  
Permit #2634-09

I. Introduction/Process Description

A. Permitted Equipment and Sources of Emissions

The Sun Mountain Lumber, Inc. (Sun Mountain) lumber mill in Deer Lodge includes the following equipment/emission sources.

1. Hurst Hog fuel-fired Boiler (EU01)
2. Cleaver-Brooks Natural Gas Boiler (EU02)
3. Lumber Dry Kilns – 5 (EU03)
4. Material Transfer Cyclone-Jointer (EU04)
5. Material Transfer Cyclone-Hog Blower (EU05)
6. Material Transfer Cyclone-Shavings Bin (EU06)
7. Chip Bin Target Box (EU07)
8. Log Sawing Fugitives (EU08)
9. Debarking Fugitives
10. Shavings Truck Loading Fugitives
11. Chip Loading Fugitives
12. Chip Bin Target Box
13. Sawdust Truck Loading Fugitives
14. Bark Loading Fugitives
15. Ash Handling Fugitives
16. Chip Screening Fugitives
17. Letourneau Fugitives (EU09)
18. Front End Loader Fugitives (EU09)
19. Log Truck Fugitives (EU09)
20. Chip, Sawdust, and Bark Truck Fugitives (EU09)

B. Source Description

Sun Mountain operates a lumber mill on the south edge of Deer Lodge, Montana. The legal description of the site is in the SW<sup>1</sup>/<sub>4</sub> of Section 4, Township 7 North, Range 9 West, Powell County. The facility is located at an elevation of approximately 4530 feet. Universal Transverse Mercator (UTM) coordinates for the facility are Zone 12, easting 366.4 kilometers and northing 5138.4 kilometers. Further, the mill is located approximately 33 miles northwest of the Anaconda-Pintler Wilderness (the nearest Class I area) and about 7 miles (east and west) of the Lewis and Clark and Deer Lodge National Forests (nearest Class II areas).

C. Permit History

On April 3, 1992, Louisiana-Pacific Corporation (L-P) was issued **Permit #2634-00** for the construction and operation of a silo-type wood-waste burner. The permit also covered all other existing sources of air emissions within the mill. The silo burner was constructed in the same general area and replaced a previously existing conical waste burner.

The silo burner, manufactured by Olivine, was made of refractory material. The burner was equipped with pot underfire and overfire air fans. Its maximum rated capacity was 5.5 tons per hour of wood waste; however, L-P estimated a nominal feed rate of 4.5 tons

per hour.

After submittal of the application for the silo burner permit, L-P installed a concrete pad around the debarker, added chip storage bins, added conveyors, and made other alterations in the mill operation. Due to these changes, L-P no longer needed to burn all the mill waste currently produced. Therefore, L-P only needed to dispose of the mill-floor waste (approximately 300 to 500 pounds per day). The mill-floor waste is contaminated by metal debris that could seriously damage the Hurst hog fuel-fired boiler, so the material could not be marketed and had to be burned. L-P, however, needed to dispose of an existing pile of wood waste. L-P estimated it would take between 60 and 90 days to dispose of the existing stockpile. L-P contended that the stockpile constituted a fire and safety hazard as it existed and needed to be removed as soon as possible. The material in the stockpile was contaminated by debris, such as rocks, that could seriously damage the Hurst hog fuel-fired boiler, so the material could not be marketed and had to be burned.

Since L-P did not wish to use the silo burner, except intermittently (3 to 5 hours per month) after disposal of the existing wood-waste stockpile, the Department of Environmental Quality (Department) postponed the source-testing deadline. The Department also suspended the ambient air monitoring requirements contained in Permit #2634-00 while the excess supply of wood waste was being burned and until the silo burner was used on a regular basis

On September 27, 1995, L-P was issued **Permit #2634-01** that removed the requirements for L-P to perform source tests for Particulate Matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), carbon monoxide (CO), and Volatile Organic Compounds (VOC) on the Hurst hog fuel-fired boiler. The permit contained no emission limits for these pollutants and required L-P to test only for information gathering purposes, that placed an unnecessary burden on the company. L-P was still required to perform source tests to determine compliance with the total particulate limits.

This modification also removed the reporting requirements for (and other references to) the York Shipley boiler. This boiler was removed from the facility.

On July 31, 1996, L-P was issued **Permit #2634-02**, which allowed for the replacement of the Multi-Clone on the Hurst hog fuel-fired boiler. As part of this permit action, L-P was still required to perform source tests to determine compliance with the total particulate limits.

On August 21, 1999, L-P was issued **Permit #2634-03**. At the request of L-P, the Department modified the existing permit to remove the Olivine wood waste silo burner and all associated conditions from the permit. Because the monitoring requirements contained in Attachment 1 were established for the Olivine wood waste silo burner, Attachment 1 was also removed from the permit. Attachment 1 may be reinstated in the future, if necessary. In addition, the Emission Inventory was updated to reflect recent de minimis changes at the facility. The de minimis changes included those changes identified in the March 4, 1999, and the May 14, 1999, letters from L-P to the Department. Finally, certain rule references and the permit format were updated. Permit #2634-03 replaced Permit #2634-02.

On December 5, 2000, the Department received a complete permit application from L-P for the alteration of Permit #2634-03. The permit action involved the following changes to the facility:

- Installation of two additional lumber dry kilns
- Upgrading of log deck and log processing equipment
- Upgrading the sawmill re-saw
- Upgrading the planer mill with optimizer trimmer, sorter, and stacker including replacement of the existing shavings cyclone with a newer and more efficient unit
- Installation of a double length infeed

The above projects were expected to proceed over the following 3-years as available funding allowed. The permitted allowable production at the plant was increased from 140-million board feet (MMbf) per year to 200 MMbf per year. To ensure that potential emissions from the facility remained below the New Source Review (NSR) Prevention of Significant Deterioration (PSD) program permitting threshold, L-P proposed a maximum production limit of 200 MMbf/year. Finally, the Department updated the equipment list contained in Section I.A of the Permit Analysis to accurately portray permitted emission sources at the facility. **Permit #2634-04** was issued final on February 15, 2001, and replaced Permit #2634-03.

On February 27, 2001, the Department received a request from L-P for an administrative change to Permit #2634-04. In the application submitted for Permit #2634-04, L-P requested a production limit on the planer and sawmill of 200 MMbf per year. The language in Section II.A.5 of Permit #2634-04, as issued, stated “Mill production shall be limited to a maximum of 200 MMbf during any rolling 12-month time period.” L-P contended that the term “mill” production could be interpreted to include production from the fingerjoint operation as well as the sawmill. Emissions from the fingerjoint operation are estimated based on the airflow and operating hours of the pneumatic collection system and cyclone and are not dependent on fingerjoint production. Therefore, the production limit stated in the permit was clarified to include only sawmill production.

To ensure that there was no confusion, the Department modified the language in Section III.A.5 to read “*Sawmill* production shall be limited to a maximum of 200 MMbf during any rolling 12-month time period.” In addition, the language in Section II.C.3 was changed to state “L-P shall document, by month, the total *sawmill* production in MMbf.”

Further, L-P requested that the Department change the reporting requirement contained in Section II.C.1. Section II.C.1, as issued in Permit #2634-04, required that L-P submit information including steam production for the Hurst hog fuel-fired boiler and hours of operation and airflow of the chip surge bin cyclone that was removed from the facility. L-P felt that this information was not necessary for the Department to make a compliance determination or for preparation of the annual Emission Inventory.

The Department concurred and modified the language contained in Section II.C.1. Further, because the chip surge bin cyclone was removed from the facility, the requirements pertaining to that cyclone were removed. **Permit #2634-05** was issued final on April 19, 2001, and replaced Permit #2634-04.

On June 28, 2001, the Department received a de minimis determination request from L-P, for the installation and operation of a ventilation system in the sawmill building. The system is used for worker safety and industrial hygiene purposes and consists of a blower, various pick-up points, and a 10 feet long cone cyclone. Nominal airflow for the system is 22,000 actual cubic feet per minute.

Indoor particulate emissions from various processes at the plant, as described in the de minimis determination request letter, were previously permitted and the system did not increase emissions from any source. Therefore, because the project did not increase the facility's Potential to Emit (PTE), the project was added to the facility in accordance with the Administrative Rules of Montana (ARM) 17.8.705(1)(r) (de minimis rule). **Permit #2634-06** was issued final on September 7, 2001, and replaced Permit #2634-05.

On August 29, 2002, the Department received a de minimis change notification from L-P for the installation and operation of a new saw to be used for cutting bundles of finished lumber for the purpose of squaring-up the ends of the finished product. Because potential Particulate Matter (PM) emissions resulting from the proposed saw were less than the de minimis threshold of 15 tons per year, the permit action was conducted in accordance with the de minimis rule. An Emission Inventory demonstrating compliance with the de minimis rule was included in Section III of the Permit Analysis for the permit. **Permit #2634-07** was issued final on October 12, 2002, and replaced Permit #2634-06.

On January 8, 2003, the Department received a complete application from L-P for proposed changes to Montana Air Quality Permit #2634-07. Specifically, L-P requested an increase in allowable PM emissions from the Hurst hog fuel-fired boiler from the currently permitted rate of 0.15 pounds per million British thermal unit (lb/MMBtu) heat input to a proposed emission rate of 0.30 lb/MMBtu. After review of other similar source emission limits included in the U.S. Environmental Protection Agency's (EPA) RACT/BACT/LAER Clearinghouse, the Department determined that the proposed PM emission limit of 0.30 lb/MMBtu constitutes Best Available Control Technology (BACT) for the Hurst hog fuel-fired boiler and that the emission limit of 0.15 lb/MMBtu was inappropriately applied at the time of original permit issuance because L-P proposed the limit as BACT.

In addition, on December 6, 2002, the Department received a request from L-P for a permit determination under the provisions of the de minimis rule. Specifically, L-P proposed the installation and operation of a new rip saw to be housed in the existing finger-joint building. Because potential uncontrolled PM (and all other regulated pollutants) emissions from the proposed rip saw were less than the de minimis threshold of 15 tons per year, the saw was added to the permitted facility in accordance with the de minimis rule. An Emission Inventory, showing the proposed increase in allowable PM emissions from the Hurst hog fuel-fired boiler and demonstrating that potential uncontrolled emissions from the rip saw are less than the de minimis threshold, is contained in Section III of the Permit Analysis to this permit. **Permit #2634-08** replaced Permit #2634-07.

D. Current Permit Action

On April 5, 2004, the Department received a letter from L-P requesting an administrative amendment to Permit #2634-08 to change the corporate name on the permit from L-P to Sun Mountain Lumber, Inc., (Sun Mountain). The current permitting action changes the corporate name on Permit #2634-08 and updates the permit to reflect current permit language and rule references used by the Department. **Permit #2634-09** replaces Permit #2634-08.

E. Additional Information

Additional information, such as applicable rules and regulations, BACT 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 quotations 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 locations 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 17.8.105 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.

2. 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).

Sun Mountain shall comply with all 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.

3. ARM 17.8.110 Malfunctions. 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.

4. ARM 17.8.111 Circumvention. No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide

2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide

3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide

4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter

5. ARM 17.8.221 Ambient Air Quality Standard for Visibility
6. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Sun Mountain 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. 1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. 2) This rule requires that no person may cause or authorize emissions to be discharged to an 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. Under this rule, Sun Mountain shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne PM.
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 PM in excess of the amount set forth in this rule.

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. Sun Mountain 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 Air Quality Operation Fees. 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 pro-rate 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. The Sun Mountain facility has a PTE greater than 25 tons per year of PM, PM<sub>10</sub>, oxides of nitrogen (NO<sub>x</sub>), CO, and VOCs; 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. Sun Mountain was not required to submit an application for the current permit action because the change is considered administrative.
  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 required BACT analysis is included 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 Sun Mountain 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 17.8.762 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.

11. 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).
12. 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.
13. 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 Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

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 PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (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 Permit #2634-09 for Sun Mountain, the following conclusions were made:
- a. The facility's PTE is greater than 100 tons/year for VOCs, CO, and PM<sub>10</sub>.
- b. The facility's PTE is less than 10 tons/year for any one HAP, and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM<sub>10</sub> 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.

Based on the previous information, Sun Mountain is a major source of emissions and is subject to the Title V Operating Permit program. On April 5, 2004, the Department received the L-P/Sun Mountain request to transfer ownership of Title V Operating Permit #OP2634-02 from L-P to Sun Mountain. Sun Mountain now operates under Title V Operating Permit #OP2634-03 which was issued final and effective on June 5, 2004.

### III. Emission Inventory

Emission Source	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Hurst Hog Fuel (Wood Waste) Boiler	42.05	42.05	3.50	30.84	84.10	1.82
Cleaver-Brooks Natural Gas Fired Boiler	0.53	0.53	0.04	6.96	5.85	0.38
Lumber Dry Kilns (5)	33.00	19.00	0	0	0	150.00
Material Transfer Cyclone - Jointer	31.54	12.61	0	0	0	0
Material Transfer Cyclone - Hog Blower	14.87	5.95	0	0	0	0
Material Transfer Cyclone - Shaving Bin	15.54	6.22	0	0	0	0
Chip Bin Target Box	1.26	0.50	0	0	0	15.75
Log Sawing Fugitives	26.11	14.82	0	0	0	0
Debarking Fugitives	8.64	3.96	0	0	0	0
Shavings Truck Loading Fugitives	8.91	3.24	0	0	0	0
Chip Loading Fugitives	2.08	0.76	0	0	0	0
Chip Bin Target Box	2.68	1.09	0	0	0	12.35
Sawdust Truck Loading Fugitives	8.58	3.11	0	0	0	0
Bark Loading Fugitives	10.03	3.65	0	0	0	0
Ash Handling Fugitives	0.0006	0.0002	0	0	0	0
Chip Screening Fugitives	1.26	0.50	0	0	0	0
Letourneau Fugitives	6.56	2.95	0	0	0	0
Front End Loader Fugitives (CAT 966)	2.11	0.95	0	0	0	0
Log Truck Fugitives	2.81	1.27	0	0	0	0
Chip, Sawdust, and Bark Truck Fugitives	1.23	.48	0	0	0	0
<b>Total</b>	<b>219.79</b>	<b>123.64</b>	<b>3.54</b>	<b>37.80</b>	<b>89.95</b>	<b>180.30</b>

- A complete Emission Inventory for each permit revision is contained in the Emission Inventory for each respective permit revision and is available from the Department upon request.

Emission Inventory Permit #2634-09 (included in total facility Emission Inventory in above table)

Emission Source	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Hurst Wood Waste Fired Boiler	42.05	42.05	3.50	30.84	84.10	5.33

Emission Source	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Finger-Joint Rip Saw	0.91	0.42	0.00	0.00	0.00	0.00
Sawdust Handling	0.78	0.28	0.00	0.00	0.00	0.00
Chip Bin Target Box	0.16	0.08	0.00	0.00	0.00	0.19
Sawdust Loading	0.26	0.09	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>2.10</b>	<b>0.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.19</b>

Hurst Hog fuel-fired Boiler

Boiler Heat Input Capacity: 32 MMBtu/hr  
 Operating Capacity: 8760 hr/yr

PM Emissions

Emission Factor: 0.30 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.30 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 42.05 ton/yr

PM<sub>10</sub> Emissions

Emission Factor: 0.30 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.30 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 42.05 ton/yr

SO<sub>2</sub> Emissions

Emission Factor: 0.025 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.025 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 3.50 ton/yr

NO<sub>x</sub> Emissions

Emission Factor: 0.22 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.22 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 30.84 ton/yr

CO Emissions

Emission Factor: 0.60 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.60 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 84.10 ton/yr

VOC Emissions

Emission Factor: 0.013 lb/MMBtu (Permit Limit)  
 Calculations: 32 MMBtu/hr \* 0.013 lb/MMBtu \* 8760 hr/yr \* 0.0005 ton/lb = 1.82 ton/yr

Finger-Joint Rip Saw

Production Capacity: 37,843 ton/yr

PM Emissions

Emission Factor: 0.048 lb/ton (assume PM is 2X FIRE PM emission factor for log de-barking)  
 Calculations: 0.048 lb/ton \* 37,843 ton/yr \* 0.0005 ton/lb = 0.91 ton/yr

#### PM<sub>10</sub> Emissions

Emission Factor: 0.022 lb/ton (Department Emission Factor – Log Sawing)  
Calculations:  $0.048 \text{ lb/ton} * 37,843 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.91 \text{ ton/yr}$

#### Sawdust Handling (Increased Potential)

Production Capacity: 1552 ton/yr

#### PM Emissions

Emission Factor: 1 lb/ton (FIRE v.6.22, SCC30700803)  
Calculations:  $1 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.78 \text{ ton/yr}$

#### PM<sub>10</sub> Emissions

Emission Factor: 0.36 lb/ton (FIRE v.6.22, SCC30700803)  
Calculations:  $0.36 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.28 \text{ ton/yr}$

#### Chip Bin Target Box (Increased Potential)

Production Capacity: 1552 ton/yr

#### PM Emissions

Emission Factor: 0.2 lb/ton (Department Emission Factor – Oregon DEQ)  
Calculations:  $0.2 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.16 \text{ ton/yr}$

#### PM<sub>10</sub> Emissions

Emission Factor: 0.1 lb/ton (Department Emission Factor – Oregon DEQ)  
Calculations:  $0.1 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.08 \text{ ton/yr}$

#### VOC Emissions

Emission Factor: 0.25 lb/ton (L-P Internal Emission Factor)  
Calculations:  $0.25 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.19 \text{ ton/yr}$

#### Sawdust Loading (Increased Potential)

Production Capacity: 1552 ton/yr

#### PM Emissions

Emission Factor: 0.33 lb/ton (Department Emission Factor)  
Calculations:  $0.33 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.26 \text{ ton/yr}$

#### PM<sub>10</sub> Emissions

Emission Factor: 0.12 lb/ton (Department Emission Factor)  
Calculations:  $0.12 \text{ lb/ton} * 1552 \text{ ton/yr} * 0.0005 \text{ ton/lb} = 0.09 \text{ ton/yr}$

#### IV. BACT Analysis

A BACT determination is required for each new or altered source. Sun Mountain 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, the current permit action is an administrative action that will not increase emissions or add or alter any emitting units; therefore, a BACT Analysis is not required.

V. Existing Air Quality

The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The current permit action is an Administrative Amendment to Permit #2634-08 and does not increase emissions from this source. Sun Mountain should be capable of continuing to operate in compliance with all applicable rules and regulations that apply to the facility.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VII. Environmental Assessment

An Environmental Assessment was not required for this permitting action because it is considered an administrative action.

Permit Analysis Prepared by: Eric Thunstrom  
Date: July 6, 2004