

## AIR QUALITY PERMIT

Issued To: Montana Renewable Resources      Permit: #4057-00  
P.O. Box 667      Application Complete: 2/20/07  
Eureka, MT 59917      Preliminary Determination Issued: 3/14/07  
Department's Decision Issued: 3/30/07  
Permit Final: 4/17/07  
AFS #: 053-0018

An air quality permit, with conditions, is hereby granted to Montana Renewable Resources (MRR), 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. Permitted Equipment

MRR owns and operates a rough lumber finishing and finish dimension mill including two planers, a molder, and associated equipment. A complete list of permitted equipment is contained in Section I.A of the permit analysis to this permit.

#### B. Plant Location

MRR is located in the southeast ¼ of Section 3, Township 36 North, Range 27 West, in Lincoln County, Montana.

### SECTION II: Conditions and Limitations

#### A. Emission and Operational Limitations

1. MRR production shall be limited to 66 million board-feet (MMbf) during any rolling 12-month time period (ARM 17.8.749).
2. MRR 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 and ARM 17.8.752).
3. MRR shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
4. MRR 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 and ARM 17.8.752).
5. MRR 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.3 and Section II.A.4 (ARM 17.8.749 and 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 of Environmental Quality (Department) may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. MRR 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).

2. MRR 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 MRR 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).
4. MRR shall document, by month, mill production in MMbf. By the 25<sup>th</sup> day of each month, MRR shall total the mill production in MMbf for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

MRR shall notify the Department of initial start-up of facility operations within 15 days of actual start-up of operations after issuance of Permit #4057-00 (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – MRR 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 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 MRR fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving MRR 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 filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- 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 MRR 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).
- I. Single Facility Determination – As defined in ARM 17.8.740(6) MRR and Eureka Pellet Mills (EPM) (Permit #2554) constitute a single facility. However, at the request of EPM and MRR, the affected sources operate under separate permits.

Permit Analysis  
Montana Renewable Resources  
Permit #4057-00

I. Introduction/Process Description

Montana Renewable Resources (MRR) owns and operates a rough lumber finishing and finish dimension mill. The MRR facility is located in the southeast ¼ of Section 3, Township 36 North, Range 27 West, in Lincoln County, Montana.

A. Permitted Equipment

Permitted equipment/emission sources at MRR include a Woods planer and associated equipment; a Yates planer and associated equipment; a Madison molder and associated equipment; and fugitive dust emission sources including planer and chipper load-out operations and vehicle traffic on unpaved roads.

B. Source Description

MRR owns and operates a rough lumber finishing and finish dimension mill in Eureka, MT. The mill purchases low value and rough-cut lumber for processing. Depending on lumber size and dimension, each piece of lumber is processed through one of three process units: 1) a Madison molder, 2) a Yates planer, or 3) a Woods planer. Each process unit has different abilities to accommodate different widths and produce different finished lumber profiles, while all have the ability to trim, rip, and plane lumber. After processing, all finished wood products are stacked, packaged, and moved by forklift to a paved area for storage. From storage, the finished and packaged lumber product is loaded onto trucks for shipment off-site. In addition, each process unit is equipped with its own blower and pneumatic conveying system to move lumber by-products (shavings, sawdust, and/or wood-chips) to an associated cyclone, which drops the lumber by-products into a storage bin. The lumber by-products are then sold for various industrial purposes.

Further, the Department of Environmental Quality (Department) determined that MRR and the adjacent Eureka Pellet Mills (EPM) plant (Permit #2554) constitute a single facility. As defined in the Administrative Rules of Montana (ARM) 17.8.740(6), “*Facility* means any real or personal property that is either stationary or portable and is located on one or more contiguous or adjacent properties under the control of the same owner or operator and that emits or has the Potential to Emit (PTE) any air pollutant subject to regulation under the Clean Air Act of Montana or the Federal Clean Air Act... and that has the same two-digit standard industrial classification code...” The following analysis provides basis for the Department’s determination that MRR and EPM constitute a single facility:

1. *Industrial Grouping*: MRR and EPM have the same 2-digit Standard Industrial Classification Code (SIC Code), SIC grouping 24.
2. *Contiguous or Adjacent Properties*: MRR and EPM are located on contiguous and adjacent properties.
3. *Control of Same Owner or Operator*: MRR and EPM are under common control and ownership, based on Department knowledge and information obtained from Montana’s Secretary of State.

Because MRR and EPM constitute a single facility, the current permit action is technically considered a modification of EPM's existing Permit #2554. However, under the current permit action, MRR and EPM requested that operations at each respective source (MRR and EPM) at the facility be regulated under separate permits. Therefore, Permit #4057-00 regulates operations at MRR and EPM maintains operations regulated under Permit #2554. MRR and EPM shall monitor operations at each respective source from a single facility perspective to ensure that operations at the facility do not trigger additional regulatory requirements including, but not limited to, the requirements of ARM 17.8, Subchapter 12 (Title V Operating Permit Program), and ARM 17.8, Subchapters 8 and 9 (Major New Source Review Permit Program).

## 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 ARM 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).

MRR 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
2. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

MRR 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 (PM). (2) Under this rule, MRR 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 17.8.340 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. MRR submitted the appropriate permit application fee for the current permit 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 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. MRR has a PTE greater than 25 tons per year of PM; 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. MRR submitted the required permit application for the current permit 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. MRR submitted an affidavit of publication of public notice for the January 11, 2007, issue of the *Tobacco Valley News*, a weekly newspaper of general circulation in the Town of Eureka in Lincoln County, Montana, as proof of compliance with the public notice requirements.
  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 MRR 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.

The Department determined that MRR and EPM constitute a single facility. Therefore, MRR and EPM must monitor operations at each respective source from a single facility perspective to ensure that operations at the facility do not trigger the requirements of ARM 17.8, Subchapter 8. 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
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> 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. The Department determined that MRR and EPM (Permit #2554) constitute a single facility. In reviewing and issuing Air Quality Permit #4057-00 for MRR, and considering operations at EPM, 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 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.
  - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that MRR is a minor source of emissions as defined under Title V. However, MRR and EPM must monitor operations at each respective source from a single facility perspective to ensure that operations at the facility do not trigger the requirements of ARM 17.8, Subchapter 12.

### III. BACT Determination

A Best Available Control Technology (BACT) determination is required for each new or altered source. MRR 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.

#### A. Planer and Molder Operations: PM and PM<sub>10</sub> BACT Analysis and Determination

A BACT analysis was submitted by MRR in Permit Application #4057-00, addressing some available methods of controlling PM and PM<sub>10</sub> emissions from planing (Woods Planer and Yates Planer) and molding (Madison Molder) operations. The Department reviewed these methods, as well as previous BACT determinations. The following available control options have been reviewed by the Department in order to make the following BACT determination:

- Wet Scrubber
- Electrostatic Precipitator (ESP)
- Fabric Filter Baghouse (FFB)
- No Additional Controls (Cyclone as Process Equipment)

Wet scrubbers are deemed technically infeasible for the proposed project for the following reasons:

- Wet scrubbers are limited to an application temperature range of 50°F to 700°F (EPA Air Pollution Control Cost Manual for wet scrubbers). The interior of the planer mill where the affected equipment would be located is generally not heated and the exhaust air will be near or only slightly higher than the outdoor ambient temperatures. The average annual outdoor ambient temperature for the area is less than 50°F.
- Mill operations rarely approach an operating schedule of 24 hours per day and 7 days per week. Without continuous air-flow through the scrubber, ice would likely form during cold weather thus limiting wet scrubber operations.
- Wet scrubbers generate a wastewater stream and MRR does not have the ability to discharge process wastewater at the site.

Each of the remaining available control technologies are technically feasible and are therefore further evaluated in this BACT analysis. Table I provides the control efficiency and resulting controlled emission rate for the remaining technically feasible control options.

Control Technology	Control Efficiency	Resulting Emissions (ton/yr)	
		PM	PM <sub>10</sub>
ESP	99.5% <sup>a</sup>	0.44	0.02
FFB	99.5% <sup>a</sup>	0.44	0.02
No Additional Control (Cyclone as Process Equipment) <sup>b</sup>	---	8.76	3.50

<sup>a</sup> Efficiency Range of 99-99.9% (similar source information)  
<sup>b</sup> Baseline considering cyclone as process equipment

All of the available and technically feasible control methods/technologies contained in Table I are used to control PM/PM<sub>10</sub> Emissions from planers and molders; therefore, these control options cannot be eliminated based on environmental or energy impacts.

Table II evaluates the cost per ton (cost effectiveness) of PM/PM<sub>10</sub> reduction achieved for the remaining available and technically feasible control options.

Control Technology	Annualized Cost	PM/PM <sub>10</sub> Emissions (tpy)	Cost Effectiveness (\$/ton)
ESP	\$714,000 <sup>a</sup>	0.44 / 0.02	81,881 / 205,172
FFB	\$278,566 <sup>b</sup>	0.44 / 0.02	31,946 / 80,048
No Additional Control (Cyclone as Process Equipment)	NA <sup>c</sup>	8.76 / 3.50	NA <sup>c</sup>

<sup>a</sup> Similar source information  
<sup>b</sup> Information provided in Application for permit #4057-00  
<sup>c</sup> Not applicable. Represents baseline considering cyclone as process equipment

Table II shows that the available and remaining technically feasible control options (ESP and FFB) would not be cost effective in controlling PM/PM<sub>10</sub> emissions from the proposed planning and molding equipment, as the associated cost effective values are outside industry norms. Based on the preceding analysis, the Department determined that the affected units with no additional control (considering cyclone as process equipment) constitutes BACT for the affected units, in this case.

B. Vehicle Traffic and Material Handling Operations: Fugitive PM and PM<sub>10</sub> Emissions BACT Analysis and Determination

Two types of emissions controls are readily available and used for suppression of fugitive PM and PM<sub>10</sub> emissions resulting from lumber by-product (chips, shavings, and sawdust) handling and vehicle traffic on paved and unpaved roads. These two control methods include water and/or chemical dust suppressant.

MRR shall not cause or authorize to be discharged into the atmosphere from any source visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. MRR must take reasonable precautions to limit the fugitive emissions of airborne PM and PM<sub>10</sub> from haul roads, access roads, parking areas, and the general area of operation. The Department determined that using water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT in this case.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

As defined in ARM 17.8.740(6) MRR and Eureka Pellet Mills (EPM) (Permit #2554-04) constitute a single facility. However, at the request of EPM and MRR, the affected sources operate under separate permits. Therefore, Permit #4057-00 regulates operations at MRR and EPM maintains operations regulated under Permit #2554-04. The following emission inventory provides emission estimates for the single facility.

Montana Renewable Resources						
tons/year						
Source	PM	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>x</sub>
Woods Planer Cyclone	8.76	3.50	---	---	---	---
Yates Planer Cyclone	8.76	3.50	---	---	---	---
Mattison Molder Cyclone	8.76	3.50	---	---	---	---
Planer Shavings Loadout	6.76	2.46	---	---	---	---
Chip Loadout	0.41	0.14	---	---	---	---
Vehicle Fugitives	3.48	1.57	---	---	---	---
<b>Totals</b>	<b>36.93</b>	<b>14.67</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Eureka Pellet Mills (Permit #2554-04)						
tons/year						
Source	PM	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>x</sub>
COEN Burner & MEC Sawdust Dryer	59.50	15.58	57.40	73.15	98.00	3.83
Pellet Cooler Cyclone	8.76	3.50	---	---	---	---
Sawdust Handling (Fugitives)	54.75	19.71	---	---	---	---
Front End Loaders (Fugitives)	2.25	1.89	---	---	---	---
Haul Trucks (Fugitives)	3.69	3.10	---	---	---	---
<b>Total</b>	<b>128.95</b>	<b>43.78</b>	<b>57.40</b>	<b>73.15</b>	<b>98.00</b>	<b>3.83</b>

Facility Emissions: Montana Renewable Resources (Permit #4057) and Eureka Pellet Mills (Permit #2554)						
tons/year						
Source	PM	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>x</sub>
Permit #4057-00: Montana Renewable Resources	36.93	14.67	---	---	---	---
Permit #2554-04: Eureka Pellet Mills	128.95	43.78	57.40	73.15	98.00	3.83
<b>Total</b>	<b>165.88</b>	<b>58.45</b>	<b>57.40</b>	<b>73.15</b>	<b>98.00</b>	<b>3.83</b>

**Emission Inventory Calculations Permit #4057-00**

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 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 8.76 ton/yr

PM<sub>10</sub> 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

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 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 8.76 ton/yr

PM<sub>10</sub> 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

Mattison 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 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 8.76 ton/yr

PM<sub>10</sub> 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: 66 MMbf/yr (Permit Limit)  
 Planer Production: 621 ton/MMbf (Department Information)  
 Calculation: 66 MMbf/yr \* 621 ton/MMbf = 40,986 ton/yr

PM Emissions

Emission Factor: 0.33 lb/ton (FIRE Version 5.0, SCC 3-07-008-03)  
Calculations: 0.33 lb/ton \* 40,986 ton/yr \* 0.0005 ton/lb = 6.76 ton/yr

PM<sub>10</sub> Emissions

Emission Factor: 0.12 lb/ton (FIRE Version 5.0, SCC 3-07-008-03)  
Calculations: 0.12 lb/ton \* 40,986 ton/yr \* 0.0005 ton/lb = 2.46 ton/yr

Chip Loadout

Production Rate: 66 MMbf/yr (Permit Limit)  
Chip Production: 411 ton/MMbf (Department Information)  
Calculation: 66 MMbf/yr \* 411 ton/MMbf = 27,126 ton/yr

PM Emissions

Emission Factor: 0.03 lb/ton (assume 10% of wood waste loadout)  
Calculations: 0.03 lb/ton \* 27,126 ton/yr \* 0.0005 ton/lb = 0.41 ton/yr

PM<sub>10</sub> Emissions

Emission Factor: 0.01 lb/ton (assume 10% of wood waste loadout)  
Calculations: 0.01 lb/ton \* 27,126 ton/yr \* 0.0005 ton/lb = 0.14 ton/yr

Vehicle Fugitives

Miles Traveled: 2321 mile/yr (Company Information)

PM Emissions

Emission Factor: 6 lb/VMT (Department Information)  
Control Efficiency: 50% (Water)  
Calculations: 6 lb/VMT \* 2321 mile/yr \* 0.0005 ton/lb \* (1-0.5) = 3.48 ton/yr

PM<sub>10</sub> Emissions

Emission Factor: 2.7 lb/VMT (Department Information)  
Control Efficiency: 50% (Water)  
Calculations: 2.7 lb/VMT \* 2321 mile/yr \* 0.0005 ton/lb \* (1-0.5) = 1.57 ton/yr

V. Existing Air Quality

The MRR facility is located in the southeast ¼ of Section 3, Township 36 North, Range 27 West, in Lincoln County, Montana. The air quality of this area is classified as better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

Based on the relatively low levels of pollutants emitted from MRR operations, the Department determined that ambient air impacts from this permitting action will be minor. The Department believes that MRR, operating under the limits and conditions contained in Permit #4057-00, will not cause or contribute to a violation of any applicable ambient air quality standard.

Further, as defined in ARM 17.8.740(6), MRR and the adjacent EPM plant (Permit #2554) constitute a single facility. However, at the request of EPM and MRR, the affected sources operate under separate permits. The Department believes that the relatively low level of emissions allowed under Permit #4057-00 and Permit #2554, collectively, will not cause or contribute to a violation of any applicable ambient air quality standard.

#### 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. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for the proposed MRR project. A copy is attached.

*Permit Analysis Prepared By:* M. Eric Merchant, MPH

*Date:* February 26, 2007

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**P.O. Box 200901, Helena, Montana 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Montana Renewable Resources  
Post Office Box 667  
Eureka, Montana 59917

*Air Quality Permit Number:* 4057-00

*Preliminary Determination Issued:* March 14, 2007

*Department Decision Issued:* March 30, 2007

*Permit Final:* April 17, 2007

1. *Legal Description of Site:* MRR is located in the southeast ¼ of Section 3, Township 36 North, Range 27 West, in Lincoln County, Montana.
2. *Description of Project:* MRR owns and operates a rough lumber finishing and finish dimension mill in Eureka, MT. The mill would purchase low value and rough-cut lumber for processing. Depending on lumber size and dimension, each piece of lumber would be processed through one of three process units: 1) a Madison molder, 2) a Yates planer, or 3) a Woods planer. Each process unit would have different abilities to accommodate different widths and would produce different finished lumber profiles, while all would have the ability to trim, rip, and plane lumber. After processing, all finished wood products would be stacked, packaged, and moved by forklift to a paved area for storage. From storage, the finished and packaged lumber product would be loaded onto trucks for shipment off-site. In addition, each process unit would be equipped with its own blower and pneumatic conveying system to move lumber by-products (shavings, sawdust, and/or wood-chips) to an associated cyclone, which would drop the lumber by-products into a storage bin. The lumber by-products would then be sold for various industrial purposes. The MRR project would be an existing source that was previously owned and operated by Owens & Hurst Lumber Co., Inc., and operated under since revoked Permit #2908.

Further, the Department determined that MRR and the existing and adjacent Eureka Pellet Mills (EPM) plant (Permit #2554) would constitute a single facility as defined in ARM 17.8, Subchapter 7. Therefore, while MRR and EPM would operate under separate air quality permits, facility operations would be regulated as a single entity, as applicable.

3. *Objectives of Project:* MRR would produce lumber and lumber byproducts (shavings, sawdust, and/or wood-chips) for sale.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because MRR demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in Permit #4057-00.

6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

**SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:** The following comments have been prepared by the Department.

**A. Terrestrial and Aquatic Life and Habitats:**

Emissions from the project would affect terrestrial and aquatic life and habitats in the proposed project area. However, as discussed in Section VI of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low level of those pollutants emitted.

Further, the plant is an existing facility proposing operation under new ownership and only minor new construction activities would occur as a result of the current permit action. Overall, any impact to the terrestrial and aquatic life and habitats of the proposed project area would be minor.

**B. Water Quality, Quantity and Distribution:**

Emissions from the proposed project would result in minor negative impacts to water quality in the proposed project area. However, as discussed in Section VI of the permit analysis any emissions and resulting deposition impacts from the project would be minor due to the low level of those pollutants emitted.

Further, the plant is an existing facility and no new water use would occur as a result of the current permit action. Overall, any impact to the water quality, quantity, and distribution in the proposed project area would be minor and generally beneficial.

C. Geology and Soil Quality, Stability, and Moisture:

The project would result in only minor impacts to the geology, soil quality, stability, and moisture of the proposed project area. The plant is an existing facility and only minor new construction or ground disturbance to the area would occur as a result of the current permit action.

Further, as discussed in Section VI of the permit analysis, the plant would result in minor air pollution emissions to the outside ambient environment. These pollutants would deposit on the soils in the surrounding area. Any impact from deposition of these pollutants would be minor and typical due to the existing industrial nature of the area and the low level of those pollutants emitted. Overall, any impact to the geology and soil quality, stability, and moisture of the proposed project area would be minor.

D. Vegetation Cover, Quantity, and Quality:

The project would result in minor impacts to the vegetation cover, quantity, and quality in the proposed project area. The plant is an existing facility and only minor new construction or ground disturbance to the area would occur as a result of the current permit action.

Further, as discussed in Section VI of the permit analysis, the plant would result in minor air pollution emissions to the outside ambient environment. These pollutants would deposit on the vegetation in the surrounding area. Any impact from deposition of these pollutants would be minor and typical due to the existing industrial nature of the area and the low level of those pollutants emitted. Overall, any impact to the vegetation cover, quantity, and quality of the proposed project area would be minor.

E. Aesthetics:

The project would result in minor impacts to the aesthetic nature of the proposed project area because the plant would operate within an existing industrial area and only minor new construction or further site disturbance would be required for the project. Because the plant is an existing facility located in an area zoned for industrial uses, the project would not change the aesthetic nature of the area. Further, visible emissions from the source would be limited to 20% opacity and the permit would include emission control requirements. Also, the project would not result in excess noise from normal operations. Overall, any impact to the aesthetic character of the proposed project area would be minor.

F. Air Quality:

The proposed project would result in the emission of pollutants to the ambient air in the proposed project area. However, based on the relatively low levels of pollutants emitted from the existing plant, the Department determined that ambient air impacts from this permitting action would be minor. The Department determined that MRR, operating under the limits and conditions included in this permit, would not cause or contribute to a violation of any applicable ambient air quality standard. Overall, any impact to the air quality of the proposed project area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources:

Emissions from the proposed project would affect unique, endangered, fragile, or limited environmental resources located in the proposed project area. However, as detailed in Section V and Section VI of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Further, the proposed project would occur at an existing facility located within an existing industrial area, so the limited amount of construction and operating disturbance required for the project would not change the typical character of the area. Overall, any impact to any existing unique, endangered, fragile, or limited environmental resources in the proposed project area would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy:

The project would result in minor demands on environmental resources of water as discussed in Section 7.B of this EA. In addition, the proposed project would occur at an existing industrial facility and only minor changes to the existing industrial process would occur. Therefore, the project would impact energy resources; however, any impacts would be minor due to the relatively small size of the industrial operations and the relatively minor changes to the existing facility under the current permit action.

Further, as discussed in Section VI of the permit analysis, the plant would result in minor air pollution emissions to the outside ambient environment. Any impact from the emission of these pollutants would be minor and typical due to the existing industrial nature of the area and the low level of those pollutants emitted. Overall, any impact to the demands on environmental resource of water, air, and energy in the proposed project area would be minor.

I. Historical and Archaeological Sites:

The proposed project would not result in any impacts to historical and archaeological sites in the proposed project area. The plant would operate within an existing industrial area and would require only a minor amount of additional construction and ground disturbance.

According to previous correspondence from the Montana State Historic Preservation Office, there is low likelihood of any disturbance to any known archaeological or historic site, given previous industrial disturbance within the area. Therefore, the project would not impact any known historic or archaeological site that may be located within or near the proposed operating site.

J. Cumulative and Secondary Impacts:

The proposed project would allow for minor modifications to existing facility operations. Overall, the cumulative and secondary impacts from this project on the physical and biological environment in the immediate area would be minor due to the relatively small size and potential environmental impact of the proposed project. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in Permit #4057-00.

Further, as defined in ARM 17.8.740(6), MRR and the adjacent EPM (Permit #2554) plant would constitute a single facility. However, at the request of EPM and MRR, the affected sources would operate under separate permits. The Department believes that the relatively low level of emissions allowed under Permit #4057-00 and Permit #2554, collectively, and conditions contained in the respective permits would not cause or contribute to a violation of any applicable ambient air quality standard. Further, because the two plants constitute a single existing facility with historic operations in the area, the Department determined that any other cumulative and secondary impacts from the proposed project would be minor and typical.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production				X		Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

**SUMMARY OF COMMENTS ON POTENTIAL ECENOMIC AND SOCIAL EFFECTS:** The Department has prepared the following comments.

- A. Social Structures and Mores:  
 B. Cultural Uniqueness and Diversity:

The proposed project would not impact the above-cites economic and social resources of the proposed area of operation because the project is small by industrial standards and the proposed project would take place within an existing facility located within an existing industrial site and only minor additional construction and no new employment would be required for normal operations. The predominant use of the surrounding area would not change as a result of the proposed project.

- C. Local and State Tax Base and Tax Revenue:

The proposed project would have a minor impact on the local and state tax base and tax revenue because the project is small by industrial standards and would not result in any increased commercial activity beyond the proposed project. Further, the plant would operate within an existing industrial site with only a minor amount of new construction or ground disturbance occurring as a result of the current permit action.

- D. Agricultural or Industrial Production:

The proposed project would operate within an existing industrial area; therefore, the project would not affect or displace any land used for agricultural production. Further, because the current action would require only a minor amount of additional industrial construction and the facility is an existing industrial operation, it is unlikely that the project would impact any industrial production.

E. Human Health:

Permit #4057-00 would include limits and conditions to ensure the facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section III of the permit analysis, the air emissions from the proposed facility would be minimized by the use of BACT as required by Permit #4057-00. Overall, only minor impacts would be expected on human health from the proposed operations.

F. Access to and Quality of Recreational and Wilderness Activities:

Because the proposed project would operate within an existing industrial area, the project would not affect any access to or quality of any recreation or wilderness activities in the area.

G. Quantity and Distribution of Employment:

H. Distribution of Population:

The proposed project would result in little, if any, new employment in the area. The project would likely utilize existing employee(s) to operate the plant; therefore, the proposed project would not impact the quantity and distribution of population and employment in the area.

I. Demands for Government Services:

Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted source of emissions would be subject to periodic inspections by government personnel. Demands for government services would be minor.

J. Industrial and Commercial Activity:

The proposed project would result in only a minor impact on local industrial and commercial activity because the proposed project would operate within an existing industrial area, would require only a minor amount of additional industrial construction, and would not result in additional industrial production. Overall, any industrial or commercial activity occurring as a result of the project would be minor.

K. Locally Adopted Environmental Plans and Goals:

The Department is unaware of any locally adopted environmental plans or goals. The permit would ensure compliance with state standards and goals. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts:

The proposed project would allow for minor modifications to existing facility operations. Overall, the cumulative and secondary impacts from this project on the human environment in the immediate area would be minor due to the relatively small size and potential environmental impact of the proposed project. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in Permit #4057-00.

Further, as defined in ARM 17.8.740(6), MRR and the adjacent EPM (Permit #2554) plant would constitute a single facility. However, at the request of EPM and MRR, the affected sources would operate under separate permits. The Department believes that the relatively low level of emissions

allowed under Permit #4057-00 and Permit #2554, collectively, and conditions contained in the respective permits would not cause or contribute to a violation of any applicable ambient air quality standard. Further, because the two plants constitute a single existing facility with historic operations in the area, the Department determined that any other cumulative and secondary impacts from the proposed project would be minor and typical.

*Recommendation:* No Environmental Impact Statement (EIS) is required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* The current permit action is for the operation of a wood products manufacturing plant. Permit #4057-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, as detailed in the above EA there are no significant impacts associated with the proposed project.

*Other groups or agencies contacted or which may have overlapping jurisdiction:* Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

*Individuals or groups contributing to this EA:* Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program.

*EA prepared by:* M. Eric Merchant, MPH

*Date:* February 26, 2007