



Montana Department of  
**ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: [www.deq.mt.gov](http://www.deq.mt.gov)

May 13, 2010

Mr. Raymond O'Brien  
RMR Aggregate, Inc.  
P.O. Box 887  
Conrad, MT 59425

Dear Mr. O'Brien:

Montana Air Quality Permit #3066-04 is deemed final as of May 12, 2010, by the Department of Environmental Quality (Department). This permit is for a portable crushing/screening plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-9741 (406) 444-3403

Deanne Fischer, P.E.  
Environmental Engineer  
Air Resources Management Bureau

VW:DF  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #3066-04

RMR Aggregate, Inc.  
P.O. Box 887  
Conrad, MT 59425

May 12, 2010



## MONTANA AIR QUALITY PERMIT

Issued To: RMR Aggregate, Inc. Montana Air Quality Permit #3066-04  
P.O. Box 887 Application Complete: 02/17/10  
Conrad, MT 59425 Preliminary Determination Issued: 03/22/10  
Department Determination Issued: 04/26/10  
Permit Final: 5/13/2010  
AFS #777-3066

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to RMR Aggregate, Inc. (RMR), pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Plant Location

RMR operates a portable crushing/screening plant with an initial location in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 19, Township 27 North, Range 3 West, in Pondera County, Montana. However, MAQP #3066-04 applies while operating in any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for all locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A complete list of the permitted equipment is included in Section I.A of the permit analysis.

#### B. Current Permit Action

On February 17, 2010, RMR submitted a complete permit application for a portable crushing/screening operation. RMR requested that MAQP #3066-03 be modified for the removal of a 1929 Symmons Cone Crusher, and the addition of the following equipment:

- a 24x36 jaw crusher (maximum capacity up to 20 tons per hour (TPH) (for a total of 3 crushers),
- one screen (maximum capacity up to 200 TPH) (for a total of 5 screens),
- 9 conveyors (maximum capacity up to 200 TPH) (for a total of 13 conveyors),
- a 70-horsepower (hp) water pump,
- a 526-hp engine/generator (for a total of 2 engines/generators), and,
- associated equipment.

The current permit action updates the permit to reflect current permit language and rule references used by the Department. .

### Section II: Conditions and Limitations

#### A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the

following averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO):

- For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
  - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity
2. All visible emissions from any NSPS-affected equipment, other than a crusher (such as screens and conveyors), shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO):
    - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
    - For equipment that commences construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity
  3. RMR shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
  4. Water and water spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
  5. RMR 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).
  6. RMR shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.752).
  7. RMR shall not operate more than three crushers at any given time and the combined maximum rated design capacity shall not exceed 270 TPH (ARM 17.8.749).
  8. Total crusher production from the facility shall be limited to 2,365,200 tons during any rolling 12-month time period (ARM 17.8.749).
  9. RMR shall not operate more than five screens at any given time and the combined maximum rated design capacity shall not exceed 1,300 TPH (ARM 17.8.749).
  10. Total screen production from the facility shall be limited to 11,388,000 tons during any rolling 12-month time period (ARM 17.8.749).
  11. RMR shall not operate more than two diesel engines/generators at any given time and the combined maximum rated design capacity of the engines shall not exceed 861 hp. Operation of the engines/generators shall not exceed 5,000 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

12. RMR shall not operate more than one diesel water pump at any given time and the maximum rated design capacity shall not exceed 70 hp (ARM 17.8.749).
13. If the permitted equipment is used in conjunction with any other equipment owned or operated by RMR, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
14. RMR shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* as applicable (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
15. RMR shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, Subpart A and Subpart OOO).
2. All compliance source tests shall conform to the requirements of 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. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. RMR shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by RMR as a permanent business record for at least 5 years following the date of the measurement, shall be available at the plant site for inspection by the Department, and shall be submitted to the Department

upon request (ARM 17.8.749).

3. RMR 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 Section I.A of 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 units, as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. RMR shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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.

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).

5. RMR shall document, by month, the total crushing production for the facility. By the 25th day of each month, RMR shall calculate the total crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. RMR shall document, by month, the total screening production for the facility. By the 25th day of each month, RMR shall calculate the screening production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
7. RMR shall document, by month, the hours of operation of the diesel engines/generators. By the 25<sup>th</sup> day of each month, RMR shall calculate the hours of operation for the diesel engines/generators for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
8. RMR shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted

along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

### Section III: General Conditions

- A. Inspection – RMR shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if RMR fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving RMR 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 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 Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by RMR may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

- J. RMR shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department-approved permitting program or areas considered tribal lands.



Montana Air Quality Permit (MAQP) Analysis  
RMR Aggregate, Inc.  
MAQP #3066-04

I. Introduction/Process Description

A. Permitted Equipment

RMR Aggregate, Inc. (RMR) operates a portable 45” cone crusher (maximum capacity up to 50 tons per hour (TPH)); a 54” cone crusher (maximum capacity up to 200 TPH); a Jaw crusher (maximum capacity up to 20 TPH); a screen (maximum capacity up to 100 TPH); two screens (maximum capacity up to 250 TPH); two screens (maximum capacity up to 350 TPH); a 335-horsepower (hp) diesel engine/generator; a 526-hp diesel engine/generator; a 70-hp water pump, thirteen (13) conveyors; and associated equipment. The facility initially operated in the SE ¼ of the NE¼ of Section 19, Township 27 North, Range 3 West, in Pondera County, Montana.

B. Source Description

RMR proposes to use this crushing/screening plant to crush and sort sand and gravel materials for sale and use in construction operations. For a typical operational setup, the raw material is loaded into the feed hopper with a wheel loader. From the hopper, the material is conveyed to crushers, and crushed. Materials are then sent to the screens, where materials are separated and conveyed to a stockpile.

C. Permit History

On August 11, 1999, RMR submitted a complete permit application to operate a screening plant consisting of a portable 1998 CEL (4’ x 10’) 2-deck screen (maximum capacity 100 TPH), an Eagle sand screw, and associated equipment. The application was assigned **MAQP #3066-00**.

On August 11, 2000, RMR submitted a complete permit application for the addition of a portable 1929 Symmons Cone Crusher (maximum capacity 100 TPH), a 1999 Perkins diesel generator (250 kilowatts (kW)), and 3 conveyors to the permitted equipment. **MAQP #3066-01** replaced MAQP #3066-00.

On November 29, 2002, RMR requested a permit modification for the addition of a 1978 Cedar Rapids screen (maximum capacity 150 TPH) and a conveyor. On December 4, 2002, the Montana Department of Environmental Quality (Department) sent a letter of determination stating that another permit application was required. Subsequently, on December 20, 2002, the Department reviewed the determination and agreed with RMR that the previously established federally enforceable Condition II.A.5. of the permit could be factored into the potential to emit (PTE) calculation. After consideration of water and water spray bars, the PTE from the proposed change was below the de minimis level identified in the Administrative Rules of Montana (ARM) 17.8.705(1)(r). Therefore, the proposed change did not require a permit prior to making the change. MAQP #3066-02 was also updated to reflect current permit language and rule references used by the Department. **MAQP #3066-02** replaced MAQP #3066-01.

On June 2, 2003, RMR requested a permit modification for the removal of a 1998 CEL 2-deck screen and a 1978 Cedar Rapids screen. RMR requested the addition of a 1991 EL-Jay 4' cone crusher (maximum capacity up to 200 tons per hour (TPH)), two crushers (maximum capacity up to 230 TPH), a 1991 EL-Jay (5'x16') screen (maximum capacity up to 200 TPH), a 1978 (6'x20') EL-Jay screen (maximum capacity up to 200 TPH), two screens (maximum capacity up to 200 TPH each), and associated equipment. In addition, RMR requested that the permit be generalized to allow for additional flexibility in equipment replacement. **MAQP #3066-03** was also updated to reflect the current permit language and rule references used by the Department. MAQP #3066-03 replaced MAQP #3066-02.

D. Current Permit Action

On February 17, 2010, RMR submitted a complete permit application for a portable crushing/screening operation. RMR requested the removal of a 1929 Symmons Cone Crusher, the addition of a 24x36 jaw crusher (maximum capacity up to 20 TPH (for a total of 3 crushers), one screen (maximum capacity up to 200 TPH) (for a total of 5 screens), 9 conveyors (maximum capacity up to 200 TPH) (for a total of 13 conveyors), a 70 hp water pump, a 526 hp diesel engine/generator (for a total of 2 generators), and associated equipment. **MAQP #3066-04** replaces MAQP #3066-03.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial quotations 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 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 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise is 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).

RMR 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.

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 which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which 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:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>
11. ARM 17.8.230 Fluoride in Forage

RMR 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 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. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, RMR 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 or authorize 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 Processes. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). RMR is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
  - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
  - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by RMR, the portable crushing equipment to be used under MAQP #3066-04 is subject to this subpart.
  - c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Owners and operators of stationary compression ignition internal combustion engines (CI ICE) that commence construction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, are subject to this subpart. Based on the information submitted by RMR, the 536 hp diesel generator to be used under MAQP #3066-04 (constructed in 2006) is subject to this subpart. Engines added in the future may be subject to this subpart.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
  - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
  - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Pursuant to 40 CFR 63.6590(a)(2)(iii), a stationary RICE located at an area source of HAP

emissions is new if construction commenced on the stationary RICE on or after June 12, 2006. Based on the information submitted by RMR, the 536 hp diesel generator to be used under MAQP #3066-04 (constructed in 2006) is potentially subject to this subpart. Engines added in the future may be subject to this subpart. Pursuant to 40 CFR 63.6590(b)(3), RICE do not have any requirements under this subpart unless they are new or reconstructed after June 12, 2006.

- 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 RMR 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. RMR 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. This 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 which 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 facility to obtain an air quality permit or permit alteration if they construct, modify, or use any asphalt plant, crusher, or screen that has the potential to emit greater than 15 tons per year of any pollutant. RMR has the potential to emit more than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), and oxides of nitrogen (NO<sub>x</sub>); 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

are not subject to the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, modification, or use of a source. RMR 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. RMR submitted an affidavit of publication of public notice for the February 11, 2010, issue of the *Independent Observer*, a newspaper of general circulation in the Town of Conrad in Pondera County, 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 RMR 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 those found in its permit, 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, 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer, including a Transfer of Location notice and an affidavit of publication from a newspaper of general circulation in the area to be affected. (2) 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 a listed source and the facility's PTE is less 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 stationary 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 a 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. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM

17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality MAQP #3066-04 for RMR, the following conclusions were made:

- a. The facility's permitted PTE is less than 100 tons/year for all criteria pollutants.
- b. The facility's PTE is less than 10 tons/year of 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 subject to current NSPS standards (40 CFR 60, Subpart OOO and potentially Subpart IIII).
- e. This facility is potentially subject to area source provisions of a current NESHAP standards (40 CFR 63, Subpart ZZZZ).
- 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.
- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
  - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

RMR has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, thus a Title V operating permit is not required. However, if minor sources subject to NSPS are required to obtain a Title V operating Permit, RMR will be required to obtain a Title V Operating Permit.

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

### III. BACT Determination

A BACT determination is required for any new or modified source. RMR shall install on the new



or modified source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be used.

The new or modified sources being added in this permit action include one 20 TPH jaw crusher, one 200 TPH screen, conveyors and associated equipment, one 70-hp water pump, and one 526-hp diesel engines/generators.

The new crusher and screen would not individually be subject to NSPS standards under 40 CFR 60, Subpart OOO. However, if they were used with the existing 200 TPH crusher or another piece of affected equipment, they would be subject to the standards described below.

Subpart OOO limits opacity from any NSPS affected crusher to 12% averaged over 6 consecutive minutes. For any other NSPS-affected equipment, such as screens or conveyor transfers, opacity would be limited to 7% or 10% (depending on construction dates) averaged over 6 consecutive minutes.

RMR shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. RMR must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from material transfers and other fugitive sources. RMR is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Due to the amount of PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emissions produced by the water pump and diesel engine/generator, add-on controls would be cost prohibitive. The 526-hp diesel engine/generator is subject to the standards under 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ for stationary reciprocating internal combustion engines. Thus, the Department determined that no additional controls beyond the federal engine standards would constitute BACT for the diesel engine/generator. In addition, no additional control would constitute BACT for the water pump. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

#### IV. Emissions Inventory

| <b>CONTROLLED</b><br><b>Emission Source</b>   | <b>tons/year</b> |             |                       |           |            |                       |
|---|------------------|-------------|-----------------------|-----------|------------|-----------------------|
|   | <b>PM</b>        | <b>PM10</b> | <b>NO<sub>x</sub></b> | <b>CO</b> | <b>VOC</b> | <b>SO<sub>2</sub></b> |
| Handling/Conveyors (13 conveyors)   | 29.89            | 10.96       | --                    | --        | --         | --                    |
| Pile forming  | 1.80             | 0.85        | --                    | --        | --         | --                    |
| Screens (2 @ 250 TPH)   | 27.38            | 9.53        | --                    | --        | --         | --                    |
| Screens (1 @ 100 TPH)   | 5.48             | 1.91        | --                    | --        | --         | --                    |
| Screens (2 @ 350 TPH)   | 38.33            | 13.34       | --                    | --        | --         | --                    |
| 20 TPH Jaw Crusher  | 0.24             | 0.11        | --                    | --        | --         | --                    |
| 50 TPH Cone Crusher   | 0.59             | 0.26        | --                    | --        | --         | --                    |
| 200 TPH Cone Crusher  | 2.37             | 1.05        | --                    | --        | --         | --                    |
| Bulk Loading  | 0.04             | 0.04        | --                    | --        | --         | --                    |
| Haul Roads / Vehicle Traffic  | 4.36             | 1.20        | --                    | --        | --         | --                    |
| 335 hp Diesel Engine Generator<br>(calculated 250 kw = 335 hp) Owner<br>could not read tag) | 1.84             | 1.84        | 25.96                 | 5.59      | 2.11       | 1.72                  |
| 526 hp Generator  | 2.89             | 2.89        | 40.77                 | 8.78      | 3.31       | 2.70                  |

|                                  |               |              |              |              |             |             |
|----------------------------------|---------------|--------------|--------------|--------------|-------------|-------------|
| Diesel Engine (70 hp water pump) | 0.67          | 0.67         | 9.50         | 2.05         | 0.77        | 0.63        |
| <b>Total Emissions</b>           | <b>120.29</b> | <b>45.86</b> | <b>76.23</b> | <b>16.43</b> | <b>6.18</b> | <b>5.04</b> |

| <b>Conveyor Transfer Point (SCC 3-05-020-06) (exist)</b>   |              |          |
|--|--------------|----------|
| Maximum Process Rate = 350 ton/hr (Maximum plant process rate)   | 350          | ton/hr   |
| Maximum Hours of Operation = 8,760 hrs/yr  | 8,760        | hrs/yr   |
| Number of Transfers = 13 transfer (Company Information)  | 13           | transfer |
| <b>Total PM Emissions:</b>   |              |          |
| Emission Factor = 0.003 lb/ton (0.0030 uncontrolled, 0.00014 controlled, AP 42, Table 11.19.2-2, 8/04)       | 0.003        | lb/ton   |
| Control Efficiency = 50%   | 50           | %        |
| Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.003 lb/ton) * (ton/2000 lb) * (13 transfer) =                 | <b>59.79</b> | ton/yr   |
| Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.003 lb/ton) * (ton/2000 lb) * (13 transfer) * (1 - 50/100) =  | <b>29.89</b> | ton/yr   |
| <b>Total PM10 Emissions:</b>   |              |          |
| Emission Factor = 0.0011 lb/ton (0.00110 uncontrolled, 0.000046 controlled, AP 42, Table 11.19.2-2, 8/04)    | 0.0011       | lb/ton   |
| Control Efficiency = 50%   | 50           | %        |
| Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0011 lb/ton) * (ton/2000 lb) * (13 transfer) =                | <b>21.92</b> | ton/yr   |
| Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0011 lb/ton) * (ton/2000 lb) * (13 transfer) * (1 - 50/100) = | <b>10.96</b> | ton/yr   |

| <b>Storage Piles</b>  |             |        |
|---|-------------|--------|
| Maximum Process Rate = 250 ton/hr (Maximum plant process rate)  | 250         | ton/hr |
| Maximum Hours of Operation = 8,760 hrs/yr   | 8,760       | hrs/yr |
| Number of Piles = 1 pile  | 1           | piles  |
| <b>PM Emissions:</b>  |             |        |
| Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.                         |             |        |
| Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00330$ lb/ton                            | 0.0033      | lb/ton |
| Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)    | 0.74        |        |
| U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)               | 8.2         | mph    |
| M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)        | 2.5         | %      |
| Control Efficiency = 50% (Water or chemical spray)  | 50          | %      |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) =                | <b>3.61</b> | ton/yr |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = | <b>1.80</b> | ton/yr |
| <b>PM10 Emissions:</b>  |             |        |
| Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.                         |             |        |
| Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00156$ lb/ton                            | 0.00156     | lb/ton |
| Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)    | 0.35        |        |

|   |             |        |
|---|-------------|--------|
| U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)               | 8.2         | mph    |
| M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)        | 2.5         | %      |
| Control Efficiency = 50% (Water or chemical spray)  | 50          | %      |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) =                | <b>1.71</b> | ton/yr |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = | <b>0.85</b> | ton/yr |

|  |              |           |
|--|--------------|-----------|
| <b><u>Screening (SCC 3-05-020-02, 03) (existing)</u></b>   |              |           |
| Maximum Process Rate = 250 ton/hr  | 250          | ton/hr    |
| Maximum Hours of Operation = 8,760 hrs/yr  | 8,760        | hrs/yr    |
| Number of Screens = 2 screen(s) (Company Information)  | 2            | screen(s) |
| <b>Total PM Emissions:</b>   |              |           |
| Emission Factor = 0.025 lb/ton (0.025 uncontrolled, 0.0022 controlled, AP 42, Table 11.19.2-2, 8/04)         | 0.025        | lb/ton    |
| Control Efficiency = 50%   | 50           | %         |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (2 screen(s)) =                 | <b>54.75</b> | ton/yr    |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (2 screen(s)) * (1 - 50/100) =  | <b>27.38</b> | ton/yr    |
| <b>Total PM10 Emissions:</b>   |              |           |
| Emission Factor = 0.0087 lb/ton (0.0087 uncontrolled, 0.00074 controlled, AP 42, Table 11.19.2-2, 8/04)      | 0.0087       | lb/ton    |
| Control Efficiency = 50%   | 50           | %         |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (2 screen(s)) =                | <b>19.05</b> | ton/yr    |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (2 screen(s)) * (1 - 50/100) = | <b>9.53</b>  | ton/yr    |
| <b><u>Screening (SCC 3-05-020-02, 03) (proposed)</u></b>   |              |           |
| Maximum Process Rate = 100 ton/hr  | 100          | ton/hr    |
| Maximum Hours of Operation = 8,760 hrs/yr  | 8,760        | hrs/yr    |
| Number of Screens = 1 screen(s) (Company Information)  | 1            | screen(s) |
| <b>Total PM Emissions:</b>   |              |           |
| Emission Factor = 0.025 lb/ton (0.025 uncontrolled, 0.0022 controlled, AP 42, Table 11.19.2-2, 8/04)         | 0.025        | lb/ton    |
| Control Efficiency = 50%   | 50           | %         |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (1 screen(s)) =                 | <b>10.95</b> | ton/yr    |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (1 screen(s)) * (1 - 50/100) =  | <b>5.48</b>  | ton/yr    |
| <b>Total PM10 Emissions:</b>   |              |           |

|  |             |        |
|--|-------------|--------|
| Emission Factor = 0.0087 lb/ton (0.0087 uncontrolled, 0.00074 controlled, AP 42, Table 11.19.2-2, 8/04)      | 0.0087      | lb/ton |
| Control Efficiency = 50%   | 50          | %      |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (1 screen(s)) =                | <b>3.81</b> | ton/yr |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (1 screen(s)) * (1 - 50/100) = | <b>1.91</b> | ton/yr |

**Screening (SCC 3-05-020-02, 03) (proposed)**

|   |       |           |
|---|-------|-----------|
| Maximum Process Rate = 350 ton/hr                     | 350   | ton/hr    |
| Maximum Hours of Operation = 8,760 hrs/yr             | 8,760 | hrs/yr    |
| Number of Screens = 2 screen(s) (Company Information) | 2     | screen(s) |

**Total PM Emissions:**

|   |              |        |
|---|--------------|--------|
| Emission Factor = 0.025 lb/ton (0.025 uncontrolled, 0.0022 controlled, AP 42, Table 11.19.2-2, 8/04)        | 0.025        | lb/ton |
| Control Efficiency = 50%  | 50           | %      |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (1 screen(s)) =                | <b>76.65</b> | ton/yr |
| Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.025 lb/ton) * (ton/2000 lb) * (2 screen(s)) * (1 - 50/100) = | <b>38.33</b> | ton/yr |

**Total PM10 Emissions:**

|  |              |        |
|--|--------------|--------|
| Emission Factor = 0.0087 lb/ton (0.0087 uncontrolled, 0.00074 controlled, AP 42, Table 11.19.2-2, 8/04)      | 0.0087       | lb/ton |
| Control Efficiency = 50%   | 50           | %      |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (1 screen(s)) =                | <b>26.67</b> | ton/yr |
| Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.0087 lb/ton) * (ton/2000 lb) * (1 screen(s)) * (1 - 50/100) = | <b>13.34</b> | ton/yr |

**Crushing [Jaw Crusher] (SCC 3-05-020-03)**

|  |       |        |
|--|-------|--------|
| Maximum Process Rate = 20 ton/hr (Application information) | 20    | ton/hr |
| Maximum Hours of Operation = 8,760 hrs/yr                  | 8,760 | hrs/yr |

**PM Emissions:**

|   |             |        |
|---|-------------|--------|
| Emission Factor = 0.0054 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0054      | lb/ton |
| Control Efficiency = 50%  | 50          | %      |
| Calculation: (20 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) =                    | <b>0.47</b> | ton/yr |
| Calculation: (20 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) * (1 - 50/100) =     | <b>0.24</b> | ton/yr |

**PM<sub>10</sub> Emissions:**

|   |                    |
|---|--------------------|
| Emission Factor = 0.0024 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0024 lb/ton      |
| Control Efficiency = 50%  | 50 %               |
| Calculation: (20 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) =                    | <b>0.21</b> ton/yr |
| Calculation: (20 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) * (1 - 50/100) =     | <b>0.11</b> ton/yr |

**Crushing [Cone Crusher] (SCC 3-05-020-03)**

|   |              |
|---|--------------|
| Maximum Process Rate = 50 ton/hr (Maximum plant process rate) | 50 ton/hr    |
| Maximum Hours of Operation = 8,760 hrs/yr                     | 8,760 hrs/yr |

**PM Emissions:**

*Based on AP-42*

|   |                    |
|---|--------------------|
| Emission Factor = 0.0054 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0054 lb/ton      |
| Control Efficiency = 50%  | 50 %               |
| Calculation: (50 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) =                    | <b>1.18</b> ton/yr |
| Calculation: (50 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) * (1 - 50/100) =     | <b>0.59</b> ton/yr |

**PM<sub>10</sub> Emissions:**

*Based on AP-42*

|   |                    |
|---|--------------------|
| Emission Factor = 0.0024 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0024 lb/ton      |
| Control Efficiency = 50%  | 50 %               |
| Calculation: (50 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) =                    | <b>0.53</b> ton/yr |
| Calculation: (50 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) * (1 - 50/100) =     | <b>0.26</b> ton/yr |

**Crushing [Cone Crusher] (SCC 3-05-020-03)**

|  |              |
|--|--------------|
| Maximum Process Rate = 200 ton/hr (Maximum plant process rate) | 200 ton/hr   |
| Maximum Hours of Operation = 8,760 hrs/yr                      | 8,760 hrs/yr |

**PM Emissions:**

*Based on AP-42*

|   |               |
|---|---------------|
| Emission Factor = 0.0054 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0054 lb/ton |
|---|---------------|

|   |                    |
|---|--------------------|
| Control Efficiency = 50%  | 50 %               |
| Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) =                   | <b>4.73</b> ton/yr |
| Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.0054 lb/ton) * (ton/2000 lb) * (1 - 50/100) =    | <b>2.37</b> ton/yr |
| <b>PM<sub>10</sub> Emissions:</b>   |                    |
| <i>Based on AP-42</i>   |                    |
| Emission Factor = 0.0024 lb/ton (tertiary crushing, uncontrolled, AP 42, Table 11.19.2-2, 8/04) | 0.0024 lb/ton      |
| Control Efficiency = 50%  | 50 %               |
| Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) =                   | <b>2.10</b> ton/yr |
| Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.0024 lb/ton) * (ton/2000 lb) * (1 - 50/100) =    | <b>1.05</b> ton/yr |

|   |                      |
|---|----------------------|
| <b>Truck unloading - SCC3-05-020-31</b>   |                      |
| Maximum Process Rate = 250 ton/hr (Maximum plant process rate)                                | 250 ton/hr           |
| Maximum Hours of Operation = 8,760 hrs/yr   | 8,760 hrs/yr         |
| <b>PM Emissions: (assume PM Emissions = PM<sub>10</sub> Emissions)</b>                        |                      |
| Predictive equation for emission factor provided per AP 42, Sec. 11.19.2-2, 8/04.             |                      |
| Emission Factor = 0.00008 lb/ton  | 0.00008 lb/ton       |
| Control Efficiency = 50% (Water spray)  | 50 %                 |
| Calculation: (250 ton/hr) * (0.00008 lb/ton) * (ton/2000 lb) * (8760 hrs/yr) =                | <b>0.0876</b> ton/yr |
| Calculation: (250 ton/hr) * (0.00008 lb/ton) * (ton/2000 lb) * (8760 hrs/yr) * (1 - 50/100) = | <b>0.04</b> ton/yr   |
| <b>PM<sub>10</sub> Emissions:</b>   |                      |
| Predictive equation for emission factor provided per AP 42, Sec. 11.19.2-2, 8/04.             |                      |
| Emission Factor = 0.00008 lb/ton  | 0.00008 lb/ton       |
| Control Efficiency = 50% (Water spray)  | 50 %                 |
| Calculation: (250 ton/hr) * (0.00008 lb/ton) * (ton/2000 lb) * (8760 hrs/yr) =                | <b>0.0000</b> ton/yr |
| Calculation: (250 ton/hr) * (0.00008 lb/ton) * (ton/2000 lb) * (8760 hrs/yr) * (1 - 50/100) = | <b>0.04</b> ton/yr   |

|   |              |
|---|--------------|
| <b>Haul Roads</b>   |              |
| Vehicle Miles Traveled (VMT) per Day = 5 VMT/day (Estimate) | 5 VMT/day    |
| VMT per hour = (5 VMT/day) * (day/24 hrs) = 0.21 VMT/hr     | 0.21 VMT/hr  |
| Hours of Operation = 8,760 hrs/yr                           | 8,760 hrs/yr |
| <b>PM Emissions:</b>  |              |

|   |             |         |
|---|-------------|---------|
| Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.                                |             |         |
| Emission Factor = $k * (s / 12)^a * (W / 3)^b = 9.56$ lb/VMT  | 9.56        | lb/VMT  |
| Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)  | 4.9         | lbs/VMT |
| s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)                          | 7.1         | %       |
| W = mean vehicle weight = 30 tons (U.S. Dept. of Transportation Comprehensive Truck Size and Weight Study, page II-3 and Table III-4, max. 30 tons) | 30          | tons    |
| a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)   | 0.7         |         |
| b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)  | 0.45        |         |
| Control Efficiency = 50% (Water spray or chemical dust suppressant)   | 50          | %       |
| Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (9.56 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) =$                               | <b>8.73</b> | tons/yr |
| Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (9.56 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) * (1-50/100) =$                  | <b>4.36</b> | tons/yr |
| <b>PM10 Emissions:</b>  |             |         |
| Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.                                |             |         |
| Emission Factor = $k * (s / 12)^a * (W / 3)^b = 2.64$ lb/VMT  | 2.64        | lb/VMT  |
| Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)  | 1.5         | lbs/VMT |
| s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)                          | 7.1         | %       |
| W = mean vehicle weight = 30 tons (U.S. Dept. of Transportation Comprehensive Truck Size and Weight Study, page II-3 and Table III-4, max. 30 tons) | 30          | tons    |
| a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)   | 0.9         |         |
| b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)  | 0.45        |         |
| Control Efficiency = 50% (Water spray or chemical dust suppressant)   | 50          | %       |
| Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (2.64 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) =$                               | <b>2.41</b> | tons/yr |
| Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (2.64 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) * (1-50/100) =$                  | <b>1.20</b> | tons/yr |

|  |                 |         |
|--|-----------------|---------|
| <b><u>Diesel Engine Generator (250 kw = 335 hp (calc'd. Owner could not read tag) (exst)</u></b> |                 |         |
| Note: Emissions are based on the power output of the engine (335 hp).                            |                 |         |
| Operational Capacity of Engine = 335 hp  | 335.00          | hp      |
| Hours of Operation = 5,000.00 hours  | 5,000           | hours   |
| <b>PM Emissions:</b>   |                 |         |
| PM Emissions = 1.84 ton/yr (Assume PM = PM10)  | <b>1.84</b>     | ton/yr  |
| PM Emissions = 3,685.00 lbs/yr (Assume PM = PM10)  | <b>3,685.00</b> | lbs/yr  |
| <b>PM-10 Emissions:</b>  |                 |         |
| Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                         | 2.20E-03        | lbs/hp- |



|   |                  |           |
|---|------------------|-----------|
| Calculation: (5,000 hours) * (335 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 1.84 ton/yr              | <b>1.84</b>      | ton/yr    |
| Calculation: (5,000 hours) * (335 hp) * (0.0022 lbs/hp-hr) = 3,685.00 lbs/yr                          | <b>3,685.00</b>  | lbs/yr    |
| <b>NOx Emissions:</b>   |                  |           |
| Emission Factor = 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                               | 3.10E-02         | lbs/hp-hr |
| Calculation: (5,000 hours) * (335 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 25.96 ton/yr              | <b>25.96</b>     | ton/yr    |
| Calculation: (5,000 hours) * (335 hp) * (0.031 lbs/hp-hr) = 51,925.00 lbs/yr                          | <b>51,925.00</b> | lbs/yr    |
| <b>CO Emissions:</b>  |                  |           |
| Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 6.68E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (335 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 5.59 ton/yr             | <b>5.59</b>      | ton/yr    |
| Calculation: (5,000 hours) * (335 hp) * (0.00668 lbs/hp-hr) = 11,189.00 lbs/yr                        | <b>11,189.00</b> | lbs/yr    |
| <b>VOC Emissions:</b>   |                  |           |
| Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) | 2.51E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (335 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 2.11 ton/yr           | <b>2.11</b>      | ton/yr    |
| Calculation: (5,000 hours) * (335 hp) * (0.0025141 lbs/hp-hr) = 4,211.12 lbs/yr                       | <b>4,211.12</b>  | lbs/yr    |
| <b>SOx Emissions:</b>   |                  |           |
| Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 2.05E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (335 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 1.717 ton/yr            | <b>1.72</b>      | ton/yr    |
| Calculation: (5,000 hours) * (335 hp) * (0.00205 lbs/hp-hr) = 3,433.75 lbs/yr                         | <b>3,433.75</b>  | lbs/yr    |

| <b><u>Diesel Engine Generator (526 hp)(proposed)</u></b>                 |                 |           |
|--|-----------------|-----------|
| Note: Emissions are based on the power output of the engine (526 hp).    |                 |           |
| Operational Capacity of Engine = 526 hp                                  | 526.00          | hp        |
| Hours of Operation = 5,000.00 hours                                      | 5,000           | hours     |
| <b>PM Emissions:</b>   |                 |           |
| PM Emissions = 2.89 ton/yr (Assume PM = PM10)                            | <b>2.89</b>     | ton/yr    |
| PM Emissions = 5,786.00 lbs/yr (Assume PM = PM10)                        | <b>5,786.00</b> | lbs/yr    |
| <b>PM-10 Emissions:</b>  |                 |           |
| Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96) | 2.20E-03        | lbs/hp-hr |

|   |                  |           |
|---|------------------|-----------|
| Calculation: (5,000 hours) * (526 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 2.89 ton/yr              | <b>2.89</b>      | ton/yr    |
| Calculation: (5,000 hours) * (526 hp) * (0.0022 lbs/hp-hr) = 5,786.00 lbs/yr                          | <b>5,786.00</b>  | lbs/yr    |
| <b>NOx Emissions:</b>   |                  |           |
| Emission Factor = 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                               | 3.10E-02         | lbs/hp-hr |
| Calculation: (5,000 hours) * (526 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 40.77 ton/yr              | <b>40.77</b>     | ton/yr    |
| Calculation: (5,000 hours) * (526 hp) * (0.031 lbs/hp-hr) = 81,530.00 lbs/yr                          | <b>81,530.00</b> | lbs/yr    |
| <b>CO Emissions:</b>  |                  |           |
| Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 6.68E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (526 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 8.78 ton/yr             | <b>8.78</b>      | ton/yr    |
| Calculation: (5,000 hours) * (526 hp) * (0.00668 lbs/hp-hr) = 17,568.40 lbs/yr                        | <b>17,568.40</b> | lbs/yr    |
| <b>VOC Emissions:</b>   |                  |           |
| Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) | 2.51E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (526 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 3.31 ton/yr           | <b>3.31</b>      | ton/yr    |
| Calculation: (5,000 hours) * (526 hp) * (0.0025141 lbs/hp-hr) = 6,612.08 lbs/yr                       | <b>6,612.08</b>  | lbs/yr    |
| <b>SOx Emissions:</b>   |                  |           |
| Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 2.05E-03         | lbs/hp-hr |
| Calculation: (5,000 hours) * (526 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 2.70 ton/yr             | <b>2.70</b>      | ton/yr    |
| Calculation: (5,000 hours) * (526 hp) * (0.00205 lbs/hp-hr) = 5,391.50 lbs/yr                         | <b>5,391.50</b>  | lbs/yr    |

| <b><u>Diesel Engine Water Pump (70 hp) (proposed)</u></b>                               |                 |           |
|---|-----------------|-----------|
| Note: Emissions are based on the power output of the engine (70 hp).                    |                 |           |
| Operational Capacity of Engine = 70 hp  | 70              | hp        |
| Hours of Operation = 8,760.00 hours   | 8,760.00        | hours     |
| <b>PM Emissions:</b>  |                 |           |
| PM Emissions = 0.67 ton/yr (Assume PM = PM10)   | <b>0.67</b>     | ton/yr    |
| PM Emissions = 1,349.04 lbs/yr (Assume PM = PM10)                                       | <b>1,349.04</b> | lbs/yr    |
| <b>PM-10 Emissions:</b>   |                 |           |
| Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                | 2.20E-03        | lbs/hp-hr |
| Calculation: (8,760 hours) * (70 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 0.67 ton/yr | <b>0.67</b>     | ton/yr    |

|   |                         |
|---|-------------------------|
| Calculation: (8,760 hours) * (70 hp) * (0.0022 lbs/hp-hr) = 1,349.04 lbs/yr                           | <b>1,349.04</b> lbs/yr  |
| <b>NOx Emissions:</b>   |                         |
| Emission Factor = 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                               | 3.10E-02 lbs/hp-hr      |
| Calculation: (8,760 hours) * (70 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 9.50 ton/yr                | <b>9.50</b> ton/yr      |
| Calculation: (8,760 hours) * (70 hp) * (0.031 lbs/hp-hr) = 19,009.20 lbs/yr                           | <b>19,009.20</b> lbs/yr |
| <b>CO Emissions:</b>  |                         |
| Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 6.68E-03 lbs/hp-hr      |
| Calculation: (8,760 hours) * (70 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 2.05 ton/yr              | <b>2.05</b> ton/yr      |
| Calculation: (8,760 hours) * (70 hp) * (0.00668 lbs/hp-hr) = 4,096.18 lbs/yr                          | <b>4,096.18</b> lbs/yr  |
| <b>VOC Emissions:</b>   |                         |
| Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) | 2.51E-03 lbs/hp-hr      |
| Calculation: (8,760 hours) * (70 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 0.77 ton/yr            | <b>0.77</b> ton/yr      |
| Calculation: (8,760 hours) * (70 hp) * (0.0025141 lbs/hp-hr) = 1,541.65 lbs/yr                        | <b>1,541.65</b> lbs/yr  |
| <b>SOx Emissions:</b>   |                         |
| Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)                             | 2.05E-03 lbs/hp-hr      |
| Calculation: (8,760 hours) * (70 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 0.629 ton/yr             | <b>0.63</b> ton/yr      |
| Calculation: (8,760 hours) * (70 hp) * (0.00205 lbs/hp-hr) = 1,257.06 lbs/yr                          | <b>1,257.06</b> lbs/yr  |

V. Existing Air Quality and Impacts

MAQP #3066-04 is issued for the operation of a portable crushing/screening plant that was initially located in the SE ¼ of the NE¼ of Section 19, Township 27 North, Range 3 West, in Pondera County, Montana. The proposed site is designated as an attainment/unclassified area for the National Ambient Air Quality Standards (NAAQS). Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects to air quality will be minor and short-lived.

VI. Ambient Air Quality Impact Analysis

MAQP #3066-04 will cover the operation while operating at any location within Montana, excluding those counties that have a Department approved permitting program, tribal lands, or those areas in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minor and short-lived.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

| YES | NO |   |
|-----|----|---|
|     |    | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?   |
|     | X  | 2. Does the action result in either a permanent or indefinite physical occupation of private property?  |
|     | X  | 3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)  |
|     | X  | 4. Does the action deprive the owner of all economically viable uses of the property?   |
|     | X  | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].  |
|     |    | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?   |
|     |    | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?   |
|     | X  | 6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)  |
|     | X  | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?   |
|     | X  | 7a. Is the impact of government action direct, peculiar, and significant?   |
|     | X  | 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?   |
|     | X  | 7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?   |
|     | X  | Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas) |

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

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

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Permitting and Compliance Division  
Air and Waste Management Bureau  
1520 East Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901  
(406) 444-3490

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued For:* RMR Aggregate, Inc.  
P.O. Box 887  
Conrad, MT 59425

*Montana Air Quality Permit Number:* #3066-04

*Preliminary Determination Issued:* March 22, 2010  
*Department Decision Issued:* April 26, 2010  
*Permit Final:* May 13, 2010

1. *Legal Description of Site:* RMR's portable crushing/screening plant would be initially located in the SE¼ of the NE¼ of Section 19, Township 27 North, Range 3 West, in Pondera County, Montana. MAQP #3066-04 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, tribal lands, or those areas in or within 10 km of certain PM<sub>10</sub> nonattainment areas. An addendum to this air quality permit will be required if RMR intends to locate in or within 10 km of certain PM<sub>10</sub> nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* RMR requested the removal of a 1929 Symmons Cone Crusher, the addition of a 24x36 jaw crusher (maximum capacity up to 20 TPH (for a total of 3 crushers), one screen (maximum capacity up to 200 TPH) (for a total of 5 screens), 9 conveyors (maximum capacity up to 200 TPH) (for a total of 13 conveyors), a 70 hp water pump, a 526 hp diesel engine/generator (for a total of 2 generators), and associated equipment.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company by the sale and use of aggregate, with the addition of the requested equipment.
4. *Additional Project Site Information:* In many cases, this crushing/screening operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality pre-construction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because RMR demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in MAQP #3066-04.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *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 Resource |       |          | 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

Terrestrials would use the same area as the crushing/screening operations. The crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life could result from water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and with minor amounts of water used for pollution control. Since good dispersion of air pollutants would occur in the proposed area of operation and only a minor amount of air emissions would be generated, only minor deposition would occur. At the initial site location, the nearest surface water is a small pond (approximately 1/10 mile away). Therefore, because the small amount of air emissions generated would correspond to an equally

small amount of pollutant deposition to local water resources and because the nearest surface water is 1/10 mile away, any impacts to the terrestrial and aquatic life and habitat would be minor.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to the area since only relatively small amounts of water would be needed. Any impacts from this proposed project would be minor as a result of using water for dust suppression and equipment operations because only small amounts of water would be required and the project would be temporary and intermittent in nature.

Further, equipment operations would result in the emissions of air pollutants, which would disperse to surrounding water resources. However, as previously stated, emissions from the additional crushing/screening equipment would be relatively minor, intermittent, and short-lived.

Also, because good pollutant dispersion would occur in this area (as the nearest surface water resource is approximately 1/10 mile away and the site sits on a plateau 75 feet above Aldrich Coulee) any impacts from pollutant deposition or from equipment operations on surface or groundwater resources would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The soils in the proposed site locations would be impacted by the crushing/screening operations due to the construction and use of the additional crushing/screening equipment. Minimal disturbance to soil would occur as a result of construction and use of the equipment because the equipment would be added to an existing crushing/screening facility and would operate in an existing open-cut pit. Pollutant deposition upon the surrounding soils from the additional equipment would be minimal. Also, considering the facility's relatively small size, portable and temporary nature, and the sites historical usage, future reclamation plan, and good pollution dispersion for the area of operations, any affects (upon geology and soil quality, stability, and moisture) from operating the additional crushing/screening equipment would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the proposed equipment would operate in conjunction with an existing facility in an existing open-cut pit, would operate in an area where good pollutant dispersion would occur, and would be a minor source of emissions and temporary in nature, impacts from the emissions from the crushing/screening facility would be minor. The vegetation surrounding the site is primarily wheat grass and the pit site is on a plateau.

As described in Section 8.F of this EA, the impacts from the air emissions from the proposed equipment would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the associated water resource and soil disturbance would be minimal, as a result of equipment construction and operation (as described in Sections 8.B and 8.C), corresponding vegetative impacts would also be minimal.

E. Aesthetics

The crushing/screening operations as a whole, including the proposed equipment, would be visible and would create additional noise in the area. MAQP #3066-04 would include conditions to control emissions, including visible emissions, from the facility. Since the crushing/screening



operations would have a minor amount of emissions, and would be portable, and have seasonal and intermittent operations, and would locate within an existing pit and in a relatively remote location, any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because MAQP #3066-04 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Additionally, the facility is considered a minor source of air pollution by industrial standards and would be located in an area where good air pollutant dispersion would occur. Therefore, the air impacts would be minor.

The operations would be limited, by MAQP #3066-04, to total emissions of 250 tons/year or less of any regulated pollutant from non-fugitive sources at the plant, in addition to any additional equipment operated at the site. Furthermore, the emissions from this facility would be subject to BACT. For example, RMR would be required to use water to reduce emissions from equipment operations, storage piles, and haul roads. Also, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are no such environmental resources found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. Therefore, no impacts upon the unique endangered, fragile, or limited environmental resources would be expected as a result of the proposed crushing/screening plant operations. However, any such effects would be expected to be minor and short-lived.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the size of the proposed crushing/screening equipment, the crushing/screening operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control emissions being generated at the site. Energy requirements would also be small because the engine/generator and water pump being added are small by industrial standards and would be powered using a non-renewable resource for fuel. In addition, impacts to air resources would be minor because the proposed equipment added to the previously permitted facility would be small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to past correspondence from the Montana State Historic Preservation Office, given the previous industrial disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore,

no impacts upon historical or archaeological sites would be expected as a result of the proposed crushing/screening plant operations. However, any such effects would be expected to be minor and short-lived.

**J. Cumulative and Secondary Impacts**

The crushing/screening operations would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the proposed equipment in addition to the existing facility would have only seasonal and intermittent use and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of PM, PM<sub>10</sub>, NO<sub>x</sub>, volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO<sub>x</sub>). Noise would also be generated from the proposed equipment and the site as a whole. Emissions and noise would cause minimal disturbance because the site is an existing pit, previously designated and used for such operations and is in a relatively remote location (in relation to any residences). Additionally, this facility, in combination with the other emissions from the site would not be permitted to exceed 250 tons per year of non-fugitive emissions.

9. *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 ECONOMIC AND SOCIAL EFFECTS:** The Department has prepared the following comments.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the proposed equipment (and the facility as a whole) would be a minor source of emissions and temporary in nature. Additionally, the equipment would be located in a previously developed open-cut pit that has been designated and used for such purposes, in an area removed from the general population, and would be required to operate under the conditions in MAQP #3066-04. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result. Also, the predominant use of the surrounding area would not change as a result of this project.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed crushing/screening operations because the site and surrounding area have been previously designated and used for such purposes and are separated from the general population. Additionally, the proposed equipment and the facility as a whole would be considered a portable/temporary source with seasonal and intermittent operations. Thus, the predominant use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the proposed equipment, in addition to the existing facility would be small by industrial standards. The facility operations would require the use of only a few existing employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue are expected to be minor because the source would be portable and the money generated for taxes would be potentially widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the proposed equipment in addition to the existing facility would be small by industrial standards and would locate in a previously disturbed industrial area. Only minor impacts to agricultural land would occur, because the facility would initially operate in an existing open-cut pit. Though the surrounding area is currently being used for some agricultural production and pastureland, only minor and temporary effects upon agricultural production (from pollutant deposition) would occur. Also, the facility operations are small and temporary in nature and would have minimal impacts upon existing vegetation, as described in Section 8.D. Additionally, pollution control would be utilized on equipment operations and production limits would be established to protect the surrounding environment at the initial operating site or any other area of operation.

E. Human Health

MAQP #3066-04 would incorporate conditions to ensure that the proposed equipment 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 8.F., the air emissions from this facility would be minimized by the use of water spray and other emission limits established in MAQP #3066-04. Therefore, only minor impacts would be expected upon human health from the proposed crushing/screening equipment.

F. Access to and Quality of Recreational and Wilderness Activities

The crushing/screening operations would be operated at an existing permitted open-cut pit, located approximately 3 ½ miles Southeast of the town of Gallup, Montana. For the initial location, operations would not affect access to recreational and wilderness activities in the area because the site is private property that is already used for the mining of gravel. Thus, no changes to recreational and wilderness activities, or access to those activities, would be expected from the operation of the crushing/screening facility. Additionally, noise impacts from the facility would be minimal because the facility would operate within the confines of an existing open cut pit. Also, the facility would be a temporary source, with minor amounts of emissions, and would be located adjacent to an unimproved roadway coming from Aldrich Coulee. Thus, any changes in the quality of recreational and wilderness activities from noise, created by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The crushing/screening operation is a small and temporary source, which would have only minor affects on the quantity and distribution of employment in the area because RMR would use only a few existing employees for the project. Thus, because only a few existing employees would be needed for such operations, any effect on the quantity and distribution of employment in the area would be minor and short-lived.

H. Distribution of Population

The crushing/screening operation is a minor source (relatively small) by industrial standards and only a few employees would be expected for the operation of the facility. Also, no individuals are expected to permanently relocate to the area as a result of operating the crushing/screening equipment. Therefore, this crushing/screening operation would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing/screening operations would represent only a minor increase in the industrial activity in the given area because of the size of the operations (relatively small by industrial standards) and the portable and temporary nature of the operations. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

RMR would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified, including the initial site location (at the SE¼ of the NE¼ of Section 19, Township 27 North, Range 3 West, in Pondera County, Montana). MAQP #3066-04 would contain limits, which would be protective of air quality and the ambient air quality standards while the facility is operating in these areas, as a locally adopted environmental plan or goal. Additionally, because the facility is a relatively small (by industrial standards) and portable source that will operate at multiple sites, on an intermittent and temporary basis, the Department believes that any impacts to existing air quality in these areas of operation would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, having a direct effect on the social environment. Because the source is relatively small (by industrial standards) and temporary, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor and temporary cumulative effects would result to the local economy.

*Recommendation:* An Environmental Impact Statement (EIS) is not required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

*Other groups or agencies contacted or which may have overlapping jurisdiction:* Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

*Individuals or groups contributing to this EA:* Department of Environmental Quality (Air Resources Waste Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

*EA prepared by:* Deanne Fischer

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