

## AIR QUALITY PERMIT

Issued To: Ravalli County Road Department      Permit: #3011-03  
244 Fairgrounds Road      Application Complete: 02/23/05  
Hamilton, MT 59840      Preliminary Determination Issued: 03/17/05  
Department's Decision Issued: 04/04/05  
Permit Final: 04/20/05  
AFS #: 777-3011

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

### SECTION I: Permitted Facilities

#### A. Plant Location

Ravalli County operates a portable crushing/screening plant at various locations throughout Montana. The plant will originally locate at the Stevensville Airport Road Gravel Pit, which is located at the intersection of Eastside Highway and Stevensville Airport Road. The legal description of the gravel pit location is the Northwest ¼ of the Southwest ¼ of Section 13, Township 9 North, Range 20 West, in Ravalli County, Montana. Permit #3011-03 applies while operating at any location within Montana except those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered tribal lands, or those 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 locations within Missoula County, Montana.* Ravalli County will be required to obtain an addendum to Permit #3011-03 to operate at locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.

#### B. Current Permit Action

On February 23, 2005, Ravalli County submitted a complete Montana Air Quality Permit Application for a modification to Permit #3011-02. Ravalli County requested that the Department remove a 1985 JCI Cone Crusher, a 1998 JCI Screen, and a 600-kilowatt (kW) diesel generator from the permit. In addition, Ravalli County requested that the Department add a 2004 JCI Cone Crusher and a 2004 JCI Screen to the permit. The current permit action incorporates Ravalli County's requests into the permit.

### 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 of 15% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 Code of Federal Regulations (CFR) 60, Subpart OOO).
2. All visible emissions from any other NSPS affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR, Subpart OOO).

3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
4. Water and 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 17.8.749 and ARM 17.8.752).
5. Ravalli County 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. Ravalli County 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 17.8.749 and ARM 17.8.752).
7. Ravalli County shall not operate more than two crushers at any given time and the combined maximum rated design capacity shall not exceed 560 tons per hour (ARM 17.8.749).
8. Total combined crushing production shall not exceed 1,560 tons during any calendar-day (ARM 17.8.749).
9. Ravalli County shall not operate more than two screens at any given time and the combined maximum rated design capacity shall not exceed 560 tons per hour (ARM 17.8.749).
10. Total combined screening production shall not exceed 1,560 tons during any calendar-day (ARM 17.8.749).
11. Ravalli County shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 545-horsepower (hp) (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Ravalli County, 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 period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749 and ARM 17.8.752).
13. Ravalli County shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, as appropriate (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions 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 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 17.8.765).
2. Ravalli County 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 not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505). Ravalli County shall submit the following information annually to the Department by March 1 of each year, and the information may be submitted with the annual emission inventory (ARM 17.8.505):

- a. The total combined crushing production on a calendar-day basis; and
  - b. The total combined screening production on a calendar-day basis.
3. Ravalli County shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to startup 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(l)(d) (ARM 17.8.745).
  4. Ravalli County shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Ravalli County as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request.

### SECTION III: General Conditions

- A. Inspection – Ravalli County 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 Ravalli County fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Ravalli County of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for 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, as amended by the 1991 Legislature, failure to pay the annual operation fee by Ravalli County may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must be begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. 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. Ravalli County shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department approved permitting program.

Permit Analysis  
Ravalli County Road Department  
Permit #3011-03

I. Introduction/Process Description

Ravalli County Road Department (Ravalli County) owns and operates a crushing/screening facility. The facility's initial location is at the Stevensville Airport Road Gravel Pit, which is located at the intersection of Eastside Highway and Stevensville Airport Road. The legal description of the gravel pit location is the Northwest ¼ of the Southwest ¼ of Section 13, Township 9 North, Range 20 West, in Ravalli County, Montana.

A. Permitted Equipment

Equipment used at the facility includes, but is not limited to the following:

1. (2) Crushers (up to 280 tons per hour each (maximum capacity));
2. (2) Screens (up to 280 tons per hour each (maximum capacity));
3. (1) Diesel Generator (up to 545-Kilowatt (kW) maximum capacity);
4. Associated equipment (conveyors and transfer points).

At the time Permit #3011-03 was issued, the following equipment was used at the facility:

1. (1) 1956 Cedar Rapids Jaw Crusher (280 ton per hour);
2. (1) 2004 JCI Screen(280 ton per hour);
3. (1) 1988 Cay, three deck scalping screen (280 ton per hour);
4. (1) 2004 JCI, three deck Flat Screen +(280 ton per hour);
5. (1) 545-kW Diesel Generator; and
6. Associated Equipment (conveyors, transfer points, etc.)

B. Source Description

For a typical operational setup, the material to be crushed is deposited in the Feed Hopper. From the Feed Hopper, the material is routed up the Feed Conveyor to the Primary Screen. Material that passes through the primary screen is stockpiled via the reject conveyor. Material that does not pass through the primary screen is deposited in the jaw crusher. The crushed material is then sent to the cone plant screen. The material that passes through the cone plant screen is stockpiled via the stacking conveyor. The material that does not pass through the cone plant screen is crushed in the cone plant cone crusher. From the cone crusher, the material is stockpiled.

C. Permit History

On August 20, 1998, Ravalli County was issued Permit #**3011-00** for the operation of a dozer trap with a feeder, a primary screen, a jaw crusher, a cone crusher with a screen, and a stacking conveyor. The permit was for a portable plant originally located at the NW ¼ of the NW ¼ of Section 29, Township 6 North, Range 20 West in Ravalli County, Montana. Ravalli was limited to 1,560 tons per calendar-day to protect the PM<sub>10</sub> ambient air quality standard.

Ravalli County requested a permit alteration to add a 350-kW diesel generator to Permit #3011-00. Ravalli intended to move to a location (E ½ of the SW ¼ of Section 5, Township 6 North, Range 20 West, Ravalli County, Montana) that did not have an electrical power source available, so the generator was necessary for equipment operations. Permit #3011-01 replaced Permit #3011-00 on June 2, 1999.

On November 13, 2001, Ravalli County submitted a complete permit application for the replacement of a 1995 Lima MAC 350-kW diesel generator with a 2001 Caterpillar Diesel Genset that included a primary generator (545 kW) with a standby Generator (600 kW). Permit #3011-02 replaced Permit #3011-01.

D. Current Permit Action

On February 23, 2005, Ravalli County submitted a complete Montana Air Quality Permit Application for a modification to Permit #3011-02. Ravalli County requested that the Department remove a 1985 JCI Cone Crusher, a 1998 JCI Screen, and a 600-kW diesel generator from the permit. In addition, Ravalli County requested that the Department add a 2004 JCI Cone Crusher and a 2004 JCI Screen to the permit. The current permit action incorporates Ravalli County's requests into the permit.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

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

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

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

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Ravalli County must maintain compliance with the applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Ravalli County 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 section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
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 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). At the time of permit issuance, the 2004 cone plant (crusher and screen) and the 1988 Cay Screen are considered NSPS affected facilities under 40 CFR 60 and are subject to the requirements of Subpart OOO.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Ravalli County submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Ravalli County has a PTE greater than 15 tons per year of particulate matter (PM) particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO) and oxides of sulfur (SO<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 do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.  
(1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Ravalli County 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. Ravalli County submitted an affidavit of publication of public notice for the February 1, 2005, issue of the *Ravalli Republic*, a newspaper of general circulation in the Town of Hamilton in Ravalli 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 Ravalli County 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).

ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

13. ARM 17.8.765 Transfer of Permit. (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 location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (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 Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. PTE greater than 100 tons per year of any pollutant;
  - b. PTE greater than 10 tons per year of any one Hazardous Air Pollutant (HAP), PTE greater than 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE greater than 70 tons per year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3011-03 for Ravalli County, the following conclusions were made:
  - a. The facility's PTE is less than 100 tons per year for any pollutant.
  - b. The facility's PTE is less than 10 tons per year for any one HAP and less than 25 tons per 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 40 CFR 60, Subpart OOO.
  - e. This facility is not subject to any current NESHAP standards.
  - f. This source is not a Title IV affected source nor a solid waste combustion unit.
  - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Ravalli County will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Ravalli County may be required to obtain a Title V Operating Permit.

### III. BACT Determination

A BACT determination is required for each new or altered source. Ravalli County shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis was conducted for PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and SO<sub>x</sub>, emissions resulting from the operation of Ravalli County's crushing/screening facility.

All visible emissions from any NSPS affected crusher shall not exhibit an opacity of 15% or greater averaged over 6-consecutive minutes. All visible emissions from any other NSPS affected equipment such as screens and conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes. In addition, all visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes. Further, if the permitted equipment is used in conjunction with any other equipment owned or operated by Ravalli County, 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 period.

Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations. Further, Ravalli County 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. Reasonable precautions will consist of treating all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant, as necessary, to control emissions of airborne particulate matter. The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity limitations and reasonable precautions requirements constitutes BACT in this case.

Due to the relatively small amount of particulate matter, PM<sub>10</sub>, NO<sub>x</sub>, CO, and SO<sub>x</sub> emissions resulting from the operation of the portable generator(s) and the cost of controlling the pollutants, add-on pollution control equipment would be cost prohibitive. Therefore, the Department determined that no additional controls will constitute BACT for the portable generator(s) in this case. The control options selected are comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Source	Tons/Year					
	TSP	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
1956 Cedar Rapids Jaw Crusher	0.71	0.34				
2004 JCI Cone Crusher	0.71	0.34				
1988 Cay Screen	4.49	2.14				
2004 JCI Screen	4.49	2.14				
Bulk Loading	4.78	2.28				
Material Transfer	4.54	2.19				
Pile Forming	7.17	3.42				
Haul Roads	2.74	1.23				
545-kW Diesel Generator	0.00	7.04	90.62	7.22	19.53	35.37
Total	29.63	21.12	90.62	7.22	19.53	35.37

\* A complete emission inventory is on file with the Department.

V. Existing Air Quality

The plant will originally locate at the Stevensville Airport Road Gravel Pit, which is located at the intersection of Eastside Highway and Stevensville Airport Road. The legal description of the gravel pit location is the Northwest ¼ of the Southwest ¼ of Section 13, Township 9 North, Range 20 West, in Ravalli County, Montana. Ravalli County is unclassifiable/attainment for all criteria pollutants.

VI. Air Quality Impacts

In the view of the Department, the amount of controlled emissions generated by the operation of the portable crushing/screening plant will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minimal and short-lived.

VII. Ambient Air Impact Analysis

The current permit action replaces a 1985 JCI Cone Crusher and a 1998 JCI Screen with a 2004 Cedar Rapids Jaw Crusher and a 2004 JCI Screen. The Department conducted ambient air quality modeling (Screen3) prior to issuing Permit #3011-00. The model demonstrated that limiting Ravalli County's production to 1,560 tons per day maintained compliance with the Montana and National Ambient Air Quality Standards (MAAQS/NAAQS). The modeling that was previously conducted is still representative of the emissions of the facility because the production limit remains in the permit.

VIII. Taking or Damaging Implication Analysis

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

IX. 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 Resources Management Bureau**  
**P.O. Box 200901, Helena, MT 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Ravalli County Road Department  
244 Fairgrounds Road  
Hamilton, MT 59840

*Air Quality Permit number:* 3011-03

*Preliminary Determination Issued:* March 17, 2005

*Department Decision Issued:* April 4, 2005

*Permit Final:* April 20, 2005

1. **Legal Description of Site:** The legal description of the gravel pit location that the facility would be initially located is the Northwest ¼ of the Southwest ¼ of Section 13, Township 9 North, Range 20 West, in Ravalli County, Montana.

In some instances, the 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, an EA would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site. If this were not the case, the facility would need to apply for a Mined Land Reclamation Permit from the IEMB prior to operating at the site.

2. **Description of Project:** The current permit action would replace a 1985 JCI Cone Crusher and a 1998 JCI Screen with a 2004 Cedar Rapids Jaw Crusher and a 2004 JCI Screen. In addition, a 600-kW backup diesel generator would be removed from the permit.
3. **Objectives of Project:** The current permit action would allow the continued operation of a portable crushing/screening plant to operate at various locations throughout Montana.
4. **Alternatives Considered:** In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Ravalli County has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. **A Listing of Mitigation, Stipulations, and Other Controls:** A list of enforceable conditions, including a BACT analysis, would be included in Permit #3011-03.
6. **Regulatory Effects on Private Property:** The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

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

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

A. Terrestrial and Aquatic life and Habitats

Terrestrials and aquatic life would use the areas in which the crushing/screening facility would operate. While deposition of pollutants would continue to occur, as explained in Section 7.F. of this EA, due to the relatively small size and temporary nature of the operation, dispersion characteristics of pollutants and the atmosphere, and conditions that would be placed in Permit #3011-03, any impacts from the deposition of pollutants would be minor. In addition, as explained in Section 1 of this EA, crushing/screening operations typically locate within a previously disturbed open-cut pit that is normally used for such activities. Therefore, only minor additional physical effects on terrestrial and aquatic life and habitats would be expected from site disturbance.

B. Water Quality, Quantity and Distribution

There would not be an increase in air emissions in the areas where the crushing/screening facility would operate; therefore, there would be little, if any additional impacts on water quality, quantity, and distribution. While deposition from air emissions would continue to occur, the Department determined that any impacts from deposition would be minor. As described in Section 7.F. of this EA, due to the relatively small amount of emissions and conditions that would be placed in Permit #3011-03, any impacts from the air emissions from the crushing/screening facility would be minor.

Further, water would be required for dust suppression. However, because of the relatively small size and temporary nature of the operation, only minor amounts of water would be required for adequate dust suppression; therefore, any impacts on water quality, quantity, or distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture

There would be minor impacts to the geology and soil quality, stability, and moisture in the areas where the crushing/screening plant would operate due to facility construction (bringing the various pieces of equipment on site and setting the equipment up for operation), increased vehicle traffic (employees coming to and from work, haul trucks leaving and returning to the site, and mobile equipment used to move material and product around the site), the use of water to control dust, and deposition of pollutants resulting from the crushing/screening operations. As explained in Section 7.F. of this EA, the relatively small size and temporary nature of the operation, dispersion characteristics of pollutants and the atmosphere, and conditions that would be placed in Permit #3011-03 would minimize the impacts from deposition.

D. Vegetation Cover, Quantity, and Quality

There would be minor impacts on the vegetative cover, quantity, and quality because small amounts of vegetation would likely be disturbed from the crushing/screening facility. However, as explained in Section 1 of this EA, crushing/screening operations typically locate within a previously disturbed open-cut pit that is normally used for such activities. Therefore, any physical effects on vegetation cover, quantity, and quality would be minor. While deposition of pollutants would occur on the surrounding vegetation, as explained in Section 7.F. of this EA, the Department determined that due to the relatively small size and temporary nature of the operation, dispersion characteristics of pollutants and the atmosphere, and conditions that would be placed in Permit #3011-03, any impacts from deposition would be minor. Also, because the water usage would be minimal (as described in Section 7.B. of this EA) and the associated soil disturbance would be minor (as described in Section 7.C. of this EA) corresponding vegetative impacts would also be minor.

E. Aesthetics

The crushing/screening facility would continue to be visible and would continue to create additional noise in the areas where it would operate. Permit #3011-03 would include conditions to control emissions, including visible emissions, from the crushing/screening facility. In addition, as explained in Section 1 of this EA, crushing/screening operations typically locate within a previously disturbed open-cut pit that is normally used for such activities. Because the crushing/screening plant is relatively small, temporary, and seasonal, and the fact that the areas where the facility would operate are typically used for such activities, any aesthetic impact to any given area of operation would be minor and would sometimes reflect impacts that are common to a given area.

F. Air Quality

Air quality impacts from the crushing/screening facility would be minor because the crushing/screening facility would be relatively small. Deposition of pollutants would continue to occur as a result of operating the crushing/screening facility. However, the Department determined that any air quality impacts from deposition would be minor due to dispersion characteristics of pollutants (stack height, stack temperature, etc.), the atmosphere (wind speed, wind direction, ambient temperature, etc.) and conditions that would be placed in Permit #3011-03. Permit #3011-03 would include conditions limiting the opacity from the plant, requiring reasonable precautions to be taken to control emissions from haul roads, access roads, parking lots, and the general work area, and limiting total emissions from the crushing/screening facility and any additional Ravalli County equipment operated at the same site to 250 tons per year or less. Further, the Department conducted ambient air quality modeling (Screen3) prior to issuing



Permit #3011-00. The model demonstrated that limiting Ravalli County's production to 1,560 tons per day maintained compliance with the Montana and National Ambient Air Quality Standards (MAAQS/NAAQS). The modeling that was previously conducted is still representative of the emissions of the facility because the production limit remains in the permit.

G. Unique Endangered, Fragile, or Limited Environmental Resources

There would be minor impacts to existing unique endangered, fragile, or limited environmental resources in any given area of operation. However, as explained in Section 1 of this EA, crushing/screening operations typically locate within a previously disturbed open-cut pit that is normally used for such activities. Due to the seasonal and portable nature of the operations, the relatively small size of the facility, and the fact that the areas where the facility would operate are typically used for such activities, any impacts to unique endangered, fragile, or limited environmental resources would be minor.

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

The crushing/screening facility would require only small quantities of water and air for proper operation due to the relatively small size of the facility and conditions that would be placed in Permit #3011-03. Small amounts of water would be used for dust control on the surrounding roadways and the associated job site. In addition, as described in Section 7.F. of this EA, air emissions generated from the facility would have minor impacts on air quality in the immediate and surrounding area. However, the operation of the crushing/screening facility is seasonal. Seasonal operations would result in fewer demands on the environmental resource of water and air. Further, the facility utilizes a diesel generator to provide power to the facility; therefore, there would be no impact on energy demand in any given area of operation. While the demand on the non-renewable resource of diesel fuel would increase, any impacts would be minor due to the seasonal nature of the operations and the relatively small size of the facility. Overall, the demands on the environmental resource of water, air, and energy would be minor.

I. Historical and Archaeological Sites

There would be an increase in emissions in the areas where the crushing/screening plant would operate, which could result in minor impacts to existing historical and archaeological sites in any given area of operation. However, as explained in Section 1 of this EA, crushing/screening operations typically locate within a previously disturbed open-cut pit that is normally used for such activities. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in the area of operation. Given the seasonal and portable nature of the operations, the relatively small size of the facility, and the fact that the areas where the facility would operate are typically used for such operations, the chance of impacting and the corresponding impacts to any historical and archaeological sites would be minor.

J. Cumulative and Secondary Impacts

The crushing/screening facility would cause minor effects on the physical and biological aspects of the human environment because the facility would generate emissions of PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>x</sub>, and VOC. Conditions that would be placed in Permit #3011-03 would ensure that no air quality impacts, other than minor air quality impacts, would occur. Noise impacts would be minor due the seasonal and portable nature of the operation and the relatively small size of the

facility. Impacts from noise would be seasonal and temporary because the crushing/screening facility is permitted as a portable source so the facility would typically move to other locations. Limitations would be established in Permit #3011-03 to minimize air pollution.

There is potential for other operations to locate at the same sites that the crushing/screening facility would use. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed site. The crushing/screening facility would be limited by Permit #3011-03 to total emissions of 250 tons per year or less from non-fugitive emissions sources at any given site. Overall, any impacts to the physical and biological environment would be minor.

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

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

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening facility would cause no disruption to native or traditional lifestyles or communities (social structures and mores) at any future site because of the relatively small size and temporary nature of the facility. In addition, it would be unlikely that the crushing/screening facility would have an impact on social structures and mores of any future area of operation because as explained in Section 1 of this EA, the facility would likely be operated in a previously disturbed industrial area typically used for such operations. Overall, there would be no impacts on social structures and mores as a result of operating the crushing/screening facility.

B. Cultural Uniqueness and Diversity

The crushing/screening facility would not impact the cultural uniqueness and diversity of the proposed area because of the relatively small size and temporary nature of the crushing/screening facility. In addition, it would be unlikely that the crushing/screening facility would have an impact

on the cultural uniqueness and diversity of any future area of operation because as explained in Section 1 of this EA, the facility would likely be operated in a previously disturbed industrial area typically used for such operations. Overall, there would be no impacts on cultural uniqueness and diversity as a result of operating the crushing/screening facility.

C. Local and State Tax Base and Tax Revenue

The proposed crushing/screening facility would have little, if any effects on local and state tax base and tax revenue. The facility would be a temporary and seasonal source. Further, no additional full time or permanent employees are expected to be added as a result of issuing Permit #3011-03 and any revenue created by the crushing/screening facility would be widespread and would be for a relatively short time period.

D. Agricultural or Industrial Production

As explained in Section 1 of this EA, the crushing/screening facility would usually locate in a previously disturbed industrial area typically used for such operations. Therefore, the Department would not expect that the crushing/screening facility would affect or displace any agricultural land or production. Further, the crushing/screening facility would be small by industrial standards and would have only a minor impact on any local industrial production.

E. Human Health

Permit #3011-03 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable rules and regulations. These rules and regulations are designed to be protective of human health. As described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of air emissions and the atmosphere, and conditions placed in Permit #3011-03. Production limitations, pollution controls, and opacity limitations on the crushing/screening facility, associated equipment, and the surrounding operational area would minimize the air emissions from the facility. Therefore, any impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The crushing/screening facility would not affect any access to recreational and wilderness activities because, as explained in Section 1 of this EA, the facility would typically be operated in an existing industrial pit. However, minor effects on the quality of recreational activities might be created by noise from operating the equipment. Any impacts from the site would be temporary, due to the portable and seasonal nature of the crushing/screening facility.

G. Quantity and Distribution of Employment

Given the relatively small size and temporary nature of the operation, the quantity and distribution of employment in any given area would not be affected. No full time, permanent employees would be expected to be hired or discharged as a result of issuing Permit #3011-03.

H. Distribution of Population

Given the relatively small size and temporary nature of the operation, the operation of the crushing/screening facility would not disrupt the normal population distribution of any given area. The operation of the crushing/screening facility would not create new employment opportunities with Ravalli County or with any surrounding businesses, so a change in population distribution would not occur.

#### I. Demands for Government Services

Government services would be required for acquiring the appropriate permits and ensuring compliance with the permits that would be issued. However, the government services required for this permit would be minor. There could be an increase in vehicle traffic resulting from the operation of the crushing/screening facility. However, any demands on government services to regulate the traffic would be minor due to the relatively small size and temporary nature of the operation. In addition, it would be unlikely that the crushing/screening facility would have an impact on demands of government services of any future area of operation because as explained in Section 1 of this EA, the facility would likely be operated in a previously disturbed industrial area typically used for such operations. Therefore, such operations would have only minor impacts to the demands on government services of any future site. Overall, the demand of government services would be minor.

#### J. Industrial and Commercial Activity

The crushing/screening facility would represent only a minor increase in the industrial activity in any given area due to the relatively small size of the operation. No additional industrial or commercial activity would result solely from the operation of the crushing/screening facility, but some of the product may be supplied to industrial and commercial sources. Any impacts to industrial and commercial activities of any given area would be minor due to the relatively small size and seasonal nature of the operation.

#### K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing Permit #3011-03. An addendum to Permit #3011-03 would be required to operate the crushing/screening facility in or within 10 kilometers of PM<sub>10</sub> nonattainment areas.

#### L. Cumulative and Secondary Impacts

Overall, impacts to the social and economic aspects of the human environment from this project would be minor because new businesses would not be drawn to the area and permanent jobs would not be created or lost due to the operation of the crushing/screening facility. Because no new employees would be hired due to the operation of the crushing/screening facility, there would be no economic impacts from new employees. In addition, any social and economic impacts would be minor and short-lived because of the relatively small size, and the seasonal and temporary nature of the operation.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permit action is for the continued operation of a crushing/screening facility. Permit #3011-03 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

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

EA prepared by: Dave Aguirre

Date: March 8, 2005