



Montana Department of
ENVIRONMENTAL **Q**UALITY

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December 24, 2009

Mr. Kim Bacon
Wibaux County Road Department
225 2nd Ave NW
Wibaux, MT 59353

Dear Mr. Kim Bacon:

Montana Air Quality Permit #3112-01 is deemed final as of December 24, 2009, by the Department of Environmental Quality (Department). This permit is for a portable crushing and screening operation. 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

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3112-01

Wibaux County Road Department
225 2nd Ave NW
Wibaux, MT 59353

December 24, 2009



MONTANA AIR QUALITY PERMIT

Issued To: Wibaux County Road Department
225 2nd Ave NW
Wibaux, MT 59353

MAQP: #3112-01
Application Complete: 10/13/2009
Preliminary Determination Issued: 11/20/2009
Department's Decision Issued: 12/8/2009
Permit Final: 12/24/2009
AFS #: 777-3112

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Wibaux County Road Department (Wibaux) 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

Wibaux operates a portable crushing/screening operation to be located in the NE ¼ of Section 2, Township 13 North, Range 59 East, in Wibaux County, MT. However, MAQP #3112-01 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, those 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 (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On September 1, 2009, the Department received a MAQP application for the addition of a 260 ton per hour (TPH) screen, engines required for hydraulic power of the crushing and screening operations, and additional conveyors associated with the screening operation. The Department determined the application to be complete on October 13, 2009.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. 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). All visible emissions from the 150 TPH crusher shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.752).
2. 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 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

3. 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 six consecutive minutes (ARM 17.8.340 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
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. Wibaux shall not operate more than one screen and the maximum capacity of the screen shall not exceed 260 TPH (ARM 17.8.749).
6. Wibaux 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).
7. Wibaux 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).
8. Wibaux shall not operate more than one engine to supply power for hydraulic operation of the crushing operation. The engine shall not exceed 165 horsepower (hp) (ARM 17.8.749).
9. Wibaux shall not operate more than one engine to supply power for hydraulic operation of the screening operation. The engine shall not exceed 100 hp (ARM 17.8.749).
10. Wibaux shall properly operate and maintain the diesel engines according to manufacturer's recommendations (ARM 17.8.752).
11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Wibaux, 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 of Environmental Quality (Department) (ARM 17.8.749).
12. Wibaux shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
13. Wibaux 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 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.2 and II.A.3 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO). Additional testing may be required by 40 CFR 60 Subpart OOO (ARM 17.8.340 and 40 CFR 60 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 and 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 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. Wibaux 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).

3. Wibaux 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*, 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 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. Wibaux 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 Wibaux as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

D. Notification

Wibaux shall provide the Department with written notification of the actual start-up date of the screen and engines postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Wibaux 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 Wibaux fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Wibaux 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. Air Quality Operating Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Wibaux 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. Wibaux 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 or areas considered tribal lands.

Permit Analysis
Wibaux County Road Department
MAQP #3112-01

I. Introduction/Process Description

Wibaux County Road Department (Wibaux) owns and operates a portable crushing/screening operation and associated equipment.

A. Permitted Equipment

Montana Air Quality Permit (MAQP) #3112-01 is for the operation of the following equipment:

- One 150 ton per hour (TPH) impact crusher (currently a 2000 Pioneer) and two associated conveyors
- One 260 TPH screen (currently a 2007 Astec Fold and Go) and two associated conveyors
- Two conveyors external to the screen or crusher
- One 100 horsepower (hp) engine to supply power for hydraulics of the screening operation (currently a 2007 John Deere)
- One 165 hp engine to supply power for hydraulics of the crushing operation (currently a 2000 Cummins)

B. Source Description

Wibaux owns and operates a portable crushing and screening operation to crush gravel and scoria.

C. Permit History

On June 6, 2000, Wibaux submitted a complete application for the operation of a 2000 Pioneer impact crusher (maximum capacity 150 TPH) with an attached conveyor and associated equipment. **MAQP # 3112-00** was issued final on August 11, 2000.

D. Current Permit Action

On September 1, 2009, the Department of Environmental Quality (Department) received a MAQP application for the addition of a 260 ton per hour (TPH) screen, engines required for hydraulic power of the crushing and screening operations, and an additional conveyor. The Department determined the application to be complete on October 13, 2009. **MAQP #3112-01** replaces MAQP #3112-00.

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. 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).

Wibaux 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 17.8.204 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
7. ARM 17.8.221 Ambient Air Quality Standard for Visibility
8. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Wibaux 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, Wibaux 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. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
 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 Part 60, Standards of Performance for New Stationary Sources (NSPS). Wibaux 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 or screening operation 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 Wibaux, the portable crusher to be used under Permit #3112-01 is not subject to this subpart because the crushing facility has a maximum rated capacity of 150 tons per hour. 40 CFR 60.670(c)(2) exempts portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less. However, should additional crushers be used with this equipment, or a de-minimis increase in crushing capacity be accomplished, this subpart may apply.

The screening operation, with a maximum rated capacity of 260 tons per hour, and constructed after August 31, 1983, is potentially subject to this part. For affected equipment that commences construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the applicable opacity limit is 10%.

Because this permit is written in a de-minimis friendly manner, conditions for screening operations built on or after April 22, 2008, were included in the permit.

- 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. Therefore, the John Deere motor associated with the screening operation is subject to this rule.
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 you commenced construction of the stationary RICE on or after June 12, 2006. Therefore, the 2007 John Deere motor associated with the screening operation is subject to this rule as a new RICE.

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. The 2000 Cummins motor associated with the crushing operation is subject to this rule as an existing RICE.

- 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. Wibaux 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 modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Wibaux has a PTE greater than 15 tons per year of particulate matter (PM) and oxides of nitrogen (NO_x); 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, modification, or use of a source. Wibaux 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. Wibaux submitted an affidavit of publication of public notice for the September 24, 2009 issue of the *Wibaux Pioneer-Gazette*, a newspaper of general circulation in the Town of Wibaux in Wibaux 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 Wibaux 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 modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (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 because 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 > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ 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 MAQP #3112-01 for Wibaux, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS (40 CFR 60, Subpart IIII and potentially OOO).
 - e. This facility is subject to area source provisions of a current NESHAP standard (40 CFR 63 Subpart ZZZZ).
 - f. This source is not a Title IV affected source
 - g. This source is not a solid waste combustion unit
 - h. This source is not an EPA designated Title V source

Based on these facts, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

III. BACT Determination

A BACT determination is required for each new or modified source. Wibaux shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

Diesel Engines

Newer engines are required to comply with federal engine emission limitations including, for example, EPA Tier 2 emission standards for non-road engines (40 CFR Part 1039), New Source Performance Standard emission limitations for stationary engines (40 CFR 60, Subpart IIII), and New Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63 Subpart ZZZZ).

Because of the small size of the engines, the presence of performance standards inherent to the design of new engines to meet EPA emission standards, and the lack of readily available and cost effective add-on controls, the Department determined that proper operation and maintenance with no additional controls constitutes BACT for the diesel engines in this case. The control options selected and the associated control costs are comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

Screen and Conveyor

Wibaux is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to control emissions. Furthermore, Wibaux is potentially required to comply with 40 CFR 60 Subpart OOO containing opacity limitations of 10% for the screen and associated equipment. The Department determined that using water spray bars, as proposed by the applicant, to maintain compliance with the opacity requirements constitutes BACT for these sources. This control option and associated control costs are comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Wibaux County Road Department Emissions Inventory - Controlled

Source	Tons/Year					
	PM	PM-10	NOx	VOC	CO	SOx
2007 Astec Screen - 260 TPH	2.51	0.84				
2000 Pioneer Crusher - 150 TPH	0.79	0.36				
100 hp John Deere Motor	0.96	0.96	13.58	1.10	2.94	0.92
165 hp Cummins Motor	1.59	1.59	22.40	1.81	4.84	1.52
Transfer Operations	0.96	0.32				
Pile Forming	8.77	4.10				
Bulk Loading	8.77	4.10				
Raw Material Loading	ND	0.11				
Haul Roads	5.49	2.05				
Total	29.84	14.43	35.98	2.91	7.78	2.44

Emissions Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours). The facility did not take limits on production or hours of operation.

** PM = particulate matter
PM-10 = particulate matter with an aerodynamic diameter of 10 microns or less
NOx = oxides of nitrogen
VOC = volatile organic carbon

CO = carbon monoxide
SOx = oxides of sulfur
HAPs = hazardous air pollutants
ND = no data available

Screens - controlled

Process Rate: 260.0000 tons/hr
Hours of operation: 8760.0000 hr/year

PM Emissions (controlled):

Emission Factor: 0.0022 lbs/ton (AP-42 Table 11.19.2-2 8/2004)
Calculations: 0.0022 lbs/ton * 150 tons/hr = 0.572 lbs/hr
0.572 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **2.505** tons/yr

PM-10 Emissions (controlled):

Emission Factor: 0.0007 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.00074 lbs/ton * 150 tons/hr = 0.192 lbs/hr
0.192 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.841** tons/yr

CRUSHERS - controlled

2000 Pioneer Crusher

Process Rate: 150.0000 tons/hr
Hours of operation: 8760.0000 hr/yr

PM Emissions (controlled):

Emission Factor: 0.0012 lbs/ton (AP-42 Table 11.19.2-2 8/2004)
Calculations: 0.0012 lbs/ton * 150 tons/hr = 0.180 lbs/hr
0.18 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.788** tons/yr

PM-10 Emissions (controlled):

Emission Factor: 0.00054 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.00054 lbs/ton * 150 tons/hr = 0.081 lbs/hr
0.081 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.355** tons/yr

Material Transfer

Process Rate: 260.0000 tons/hr
Number of Transfers 6.0000 Transfers
Hours of operation: 8760.0000 hr/yr

PM Emissions:

Emission Factor: 0.000140 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.00014 lbs/ton * 260 tons/hr * 6 Transfers = 0.218 lbs/hr
0.218 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.955** tons/yr

PM-10 Emissions:

Emission Factor: 0.000046 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.000046 lbs/ton * 260 tons/hr * 6 Transfers = 0.072 lbs/hr
0.072 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.315** tons/yr

Pile Forming (1 Pile assumed at max process rate for calculation purposes) -

Process Rate: 260.0000 tons/hr
Hours of operation: 8760.0000 hr/yr

PM Emissions:

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

k = 0.74 for PM
k = 0.35 for PM10
M = 1.50 % average moisture content observed in mineral processing: AP-42 table 11.19.2-1 note b
U = 9.10 MPH statewide average : <http://met-www.cit.cornell.edu/ccd/wndspd98.html>

PM E = 0.0077 lbs/ton
PM10 E = 0.0036 lbs/ton

PM Emissions:

Emission Factor: 0.0077 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0077 lbs/ton * 260 tons/hr = 2.002 lbs/hr
2.002 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 8.769 tons/yr

PM-10 Emissions:

Emission Factor: 0.0036 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0036 lbs/ton * 260 tons/hr = 0.936 lbs/hr
0.936 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 4.100 tons/yr

Bulk Loading

Process Rate 260.0000 tons/hr
Hours of operation: 8760.0000 hr/yr

PM Emissions:

Emission Factor: 0.0077 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0077 lbs/ton * 260 tons/hr = 2.002 lbs/hr
2.002 * 8760 hr/yr * 0.0005 tons/lb = 8.769 TPY

PM10 Emissions:

Emission Factor: 0.0036 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0036 lbs/ton * 260 tons/hr = 0.936 lbs/hr
0.936 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 4.100 tons/yr

Engines

Rated hp: 100.0000 hp
8760.0000 hrs

PM Emissions - hP

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0022 lb/hP-hr *100 hP = 0.220 lb/hr
0.22 lbs/hr *8760 hrs * 0.0005 tons/lb = **0.964** tons/yr

PM-10 Emissions

assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)
0.220 lb/hr
0.964 tons/yr

NO_x

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.031 lb/hP-hr *100 hP = 3.100 lb/hr
3.1 lbs/hr *8760 hrs * 0.0005 tons/lb = **13.578** tons/yr

CO

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0067 lb/hP-hr *100 hP = 0.670 lb/hr
0.67 lbs/hr *8760 hrs * 0.0005 tons/lb = **2.935** tons/yr

SO_x

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0021 lb/hP-hr *100 hP = 0.210 lb/hr
0.21 lbs/hr *8760 hrs * 0.0005 tons/lb = **0.920** tons/yr

VOC

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations 0.0025 lb/hp-hr *100 hp = 0.250 lb/hr
0.25 lb/hr *8760 hrs * 0.0005 tons/lb = **1.095** tons/yr

Total HAPs

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)
Conversion Factor 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations 7000 BTU/hp-hr *100 hp *0.0037 lb/MMBTU * 10⁻⁶ MMBTU/BTU = 0.003 lb/hr
0.003 lb/hr *8760 hr * 0.0005 tons/lb = **0.013 ton/yr**

Engines

Rated hp: 165.0000 hp
8760.0000 hrs

PM Emissions - hP

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0022 lb/hP-hr *100 hP = 0.363 lb/hr
0.363 lbs/hr *8760 hrs * 0.0005 tons/lb = 1.590 tons/yr

PM-10 Emissions

assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)
0.363 lb/hr
1.590 tons/yr

NO_x

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.031 lb/hP-hr *100 hP = 5.115 lb/hr
5.115 lbs/hr *8760 hrs * 0.0005 tons/lb = 22.404 tons/yr

CO

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0067 lb/hP-hr *100 hP = 1.106 lb/hr
1.106 lbs/hr *8760 hrs * 0.0005 tons/lb = 4.844 tons/yr

SO_x

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0021 lb/hP-hr *100 hP = 0.347 lb/hr
0.347 lbs/hr *8760 hrs * 0.0005 tons/lb = 1.520 tons/yr

VOC

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0025 lb/hp-hr *165 hp = 0.413 lb/hr
0.413 lb/hr *8760 hrs * 0.0005 tons/lb = 1.809 tons/yr

Total HAPs

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)
Conversion Factor: 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 7000 BTU/hp-hr *165 hp *0.0037 lb/MMBTU * 10⁻⁶ MMBTU/BTU = 0.004 lb/hr
0.004 lb/hr *8760 hr * 0.0005 tons/lb = 0.018 ton/yr

Haul Roads

$$E = k (s/12)^a (W/3)^b$$

where k, a, b, c and d are empirical constants (Reference 6) given below and

E = size-specific emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)

s = 7.1 %

W = 50 tons

Vehicle Miles Traveled: 5 VMT/day {Estimated}

Constant	Industrial Roads (Equation 1a)			Public Roads (Equation 1b)		
	PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9	0.18	1.8	6.0
a	0.9	0.9	0.7	1	1	1
b	0.45	0.45	0.45	-	-	-
c	-	-	-	0.2	0.2	0.3
d	-	-	-	0.5	0.5	0.3
Quality Rating	B	B	B	B	B	B

*Assumed equivalent to total suspended particulate matter (TSP)
“-” = not used in the emission factor equation

PM Emissions:

PM Emission Factor (Rated Load Capacity <50 tons):

a = 0.7
b = 0.45
k = 4.9
E = 12.03599474 lb/VMT
Control Factor = 50.00%

PM= 30.09 Lbs/day
5.49 ton/yr

PM10 Emissions:

PM10 Emission Factor (Rated Load Capacity <50 tons):

a = 0.9
b = 0.45
k = 1.5
E = 4.503094873 lb/VMT

PM= 11.26 Lbs/day
2.05 ton/yr

Raw Material Loading

Process Rate 260.0000 tons/hr
Hours of operation: 8760.0000 hr/yr

PM-10 Emissions:

Emission Factor: 0.000100 lbs/ton
Calculations: 0.0001 lbs/ton * 260 tons/hr = 0.026 lbs/hr
0.026 * 8760 hr/yr * 0.0005 tons/lb = **0.114 TPY**

V. Existing Air Quality

MAQP #3112-01 allows operation at various locations throughout Montana. The areas covered by MAQP #3112-01 are designated as attainment/unclassified for the ambient air quality standards.

VI. Air Quality Impacts

The Department determined that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action will be minor. The Department believes operating within permit conditions will not cause or contribute to a violation of any ambient air quality standard.

VIII. 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	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	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.

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: Wibaux County Road Department
225 2nd Ave NW
Wibaux, MT 59353

Montana Air Quality Permit number: 3112-01

Preliminary Determination Issued: 11/20/2009

Department Decision Issued: 12/08/2009

Permit Final: 12/24/2009

1. *Legal Description of Site:* Wibaux County Road Department (Wibaux) owns and operates a portable crushing/screening operation to be located at NE ¼ of Section 2, Township 13 North, Range 59 East, in Wibaux County, Montana.
2. *Description of Project:* Wibaux proposes to operate a screen and associated equipment in conjunction with the crushing operation currently present to sort materials to a specific size and recycle rejects back through a crusher.
3. *Objectives of Project:* The objectives of the project are to increase operational flexibility of the crushing/screening operation by adding a screen and conveyor, and required engines for hydraulics.
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 Wibaux 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 MAQP #3112-01.
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			XX			Yes
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	Historical and Archaeological Sites			XX			Yes
J	Cumulative and Secondary Impacts			XX			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 may use the same area as the screening operation. The proposed project would be considered a minor source of emissions by industrial standards. Minor effects on terrestrial life would be expected as a result from pollutant deposition.

Impacts on aquatic life may result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions. Water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor effects to aquatic life and habitat would be expected from the proposed screening operation.

B. Water Quality, Quantity and Distribution

Water would be required for pollution control for equipment operation. However, pollutant deposition and water use would cause minor impacts as only a small volume of water would be used and only a small amount of pollution deposition would be expected. Overall, the equipment would be expected to have minor impacts to water quality, quantity, and distribution in the area of operation.

C. Geology and Soil Quality, Stability and Moisture

The facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for crushing/screening operations. Therefore, impacts from the emissions from the screening operation would be expected to be minor.

The screening operation would have only minor impacts on soils in any proposed site location because the facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Therefore, any affects upon geology and soil quality, stability, and moisture at any proposed operational site would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Because the equipment at the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for crushing/screening operations, impacts from the emissions of the screening operation would be minor.

The amount of air emissions from this project would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor.

E. Aesthetics

The screening operation would be visible and would create additional noise while operating. However, MAQP #3112-01 would include conditions to control emissions, including visible emissions, from the plant. Also, because the screening operation would be portable, would be expected to operate on an intermittent and seasonal basis, and would typically locate within an open-cut pit, any visual and noise impacts would be expected to be minor and short-lived.

F. Air Quality

The air quality impacts from the screening operation would be minor because the facility would be relatively small. MAQP #3112-01 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP #3112-01 would limit total emissions from the operation and any additional equipment operated by Wibaux at the site to 250 tons per year or less.

The diesel engines associated with this operation would be small. This facility would be expected to be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Air quality impacts would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

To assess potential impacts to unique endangered, fragile, or limited environmental resources in the proposed area of operations, the Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location. Search results concluded there is one species of special concern. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

The search concluded that the Sander Canadensis (Sauger) is present within the search area. The current permit action would result in the emission of air pollutants, which may result in minor impacts to existing unique endangered, fragile, or limited environmental resource in any given area of operation. However, given the relatively small industrial size of the operation, and the expected temporary and seasonal operation, any impact would be expected to be minor and short-lived. In addition, typical operations would take place within a previously disturbed location.

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

The screening operation would require only small quantities of water, air, and energy for proper operation. Water would be used for dust suppression and would control particulate emissions being generated at the site. However, water use is expected to be via water truck and the total usage relatively small. Energy requirements would also be small as the associated engines are small and the facility would not be expected to be used continuously. Therefore, any impacts to water, air, and energy resources in any given area would be minor.

I. Historical and Archaeological Sites

The Department contacted the State Historic Preservation Office (SHPA) to request a cultural resource file search for the project location to aid the Department in the assessment of impacts to historical and archeological sites. The SHPO file search reported no previously recorded sites within the designated search area.. The Department would expect minor, if any, impacts to any sites present in the area.

J. Cumulative and Secondary Impacts

The proposed project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. Additionally, this facility, in combination with the other emissions from Wibaux equipment operations at the site would not be permitted to exceed 250 tons per year. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be expected to 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			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes
J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals					XX	Yes
L	Cumulative and Secondary Impacts			XX			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 proposed project would result in minor, if any, impacts to social structures and mores. The project will typically operate in an area designated for such activities. Furthermore, operations are expected to be intermittent and seasonal.

B. Cultural Uniqueness and Diversity

The proposed project would result in minor, if any, impacts to cultural uniqueness and diversity. The project will typically operate in an area designated for such activities. Furthermore, operations are expected to be intermittent and seasonal. No significant increase in the number of employees required to operate the equipment is expected.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue. The additional equipment proposed would not be expected to require any more than a negligible increase in employees.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the project would increase air emissions slightly. Because only a minor increase in air emissions is expected, minimal deposition of air pollutants would occur on the surrounding land, and only minor, if any effects on the surrounding vegetation or agricultural production would occur. In addition, the facility operations would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation. The equipment would typically operate in areas previously designated and used for crushing/screening operations.

E. Human Health

Conditions would be incorporated into the permit to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. The air emissions from this project would be minimized by the use of water spray.

F. Access to and Quality of Recreational and Wilderness Activities

This facility would typically be located on previously disturbed property and would not impact access to recreational and wilderness activities. Minor impact on the quality of recreational activities might be created by noise. Visible air emissions would be minimized as a result of limitations placed in the Montana Air Quality Permit and the expected temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

This facility would be a small, portable operation, with expected seasonal and intermittent operations. Therefore, this project would not be expected to have long-term effects upon the quantity and distribution of employment in any given area of operation.

H. Distribution of Population

The facility would be small and temporary in nature with very few employees. Therefore, the facility would be expected to have little, if any impact on the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor, as the permitting action proposed adds equipment to an already permitted operation.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would continue to be a small industrial source, and be portable and temporary in nature. Very little additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals. The proposed project would be allowed by its Montana Air Quality Permit to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An addendum would be required to operate in or within 10 kilometers (km) of a PM₁₀ nonattainment area. The permit would contain maximum capacity and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be small and portable, any impacts from the project would be minor.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a screening operation including diesel engines and conveyor. MAQP #3112-01 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: Shawn Juers

Date: 11/6/2009