Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

August, 19, 2009

Tim Miller
Yellowstone County
3321 King Ave. E
Billings, MT 59101

Dear Mr. Miller:

Montana Air Quality Permit #4434-00 is deemed final as of August 19, 2009, by the Department of Environmental Quality (Department). This permit is for a portable gravel crusher. 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

Trista Glazier
Air Quality Specialist
Air Resources Management Bureau
(406) 444-3403

VW:TG
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4434-00

Yellowstone County
3321 King Ave. E
Billings, MT 59101

August 19, 2009

MONTANA AIR QUALITY PERMIT

Issued To: Yellowstone County
3321 King Ave. E
Billings, MT 59101

MAQP: #4434-00
Application Complete: 6/26/09
Preliminary Determination Issued: 7/14/09
Department's Decision Issued: 08/03/09
Permit Final: 8/19/09
AFS #:777-4434

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

SECTION I: Permitted Facilities

A. Permitted Equipment

Yellowstone is proposing to operate a portable crushing facility consisting of a crusher with a maximum design capacity of 150 ton per hour (TPH) and a diesel-powered engine with a maximum design capacity of 275 horsepower (hp).

B. Plant Location

Yellowstone operates a portable crusher and diesel-powered engine, which will initially be located at Section 26, Township 5 North, Range 33 East, in Yellowstone County, Montana. However, MAQP #4434-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

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 and 40 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 and 40 CFR 60, 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).

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).

5. Yellowstone 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).

6. Yellowstone 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).

7. Crushing production is limited to 1,314,000 tons during any rolling 12-month time period (ARM 17.8.749).

8. Yellowstone shall not operate more than one diesel-powered engine with a maximum design capacity not to exceed 275 hp at any given time (ARM 17.8.749).

9. If the permitted equipment is used in conjunction with any other equipment owned or operated by Yellowstone, 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).

10. Yellowstone shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

11. Yellowstone 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.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this 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

2. Yellowstone 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. Yellowstone 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. Yellowstone 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 Yellowstone 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).

5. Yellowstone shall document, by month, the crushing production from the facility. By the 25th day of each month, Yellowstone shall calculate the crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – Yellowstone 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 Yellowstone fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Yellowstone 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, failure to pay the annual operation fee by Yellowstone 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. Yellowstone 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
Yellowstone County
Montana Air Quality Permit (MAQP) #4434-00

I. Introduction/Process Description

Yellowstone County (Yellowstone) owns and operates a portable crushing facility.

A. Permitted Equipment

Yellowstone operates a portable crushing plant consisting of a crusher with a maximum rated capacity of 150 ton per hour (TPH) and a diesel-powered engine with a maximum rated capacity of 275 horsepower (hp).

B. Source Description

Yellowstone proposes to operate this crushing plant, using the equipment described above, to crush rock into specific sized gravel. For a typical operational setup, unprocessed material is loaded into a vibrating feeder which directly transfers the material to the crusher. Crushed product material is conveyed to an attached screen for sorting. Finished product is deposited onto finished material stock piles. Yellowstone will utilize a diesel-powered engine rated for 275 hp.

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).

Yellowstone 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_{10}

Yellowstone 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, Yellowstone 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 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Yellowstone is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Yellowstone, the portable crushing equipment to be used under Montana Air Quality Permit (MAQP) #4434-00 is not subject to this subpart because the crusher has a maximum design capacity of 150 TPH.

c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). This rule indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump engine. In order to keep the permit de minimis-friendly, this permit authorizes the use of a diesel-powered engine up to 275 hp. The permit application states that the facility will be powered primarily by a diesel engine that was manufactured in 2009; therefore, this CI ICE will be subject to this Subpart.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule requires that a source, as defined and applied in 40 CFR Part 63, comply with the requirements of 40 CFR Part 63.

a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below:

b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). Diesel RICE engines are an affected source if they are new or reconstructed on or after June 12, 2006. Any diesel RICE engine operated by Yellowstone that is new or reconstructed on or after June 12, 2006, will be subject to this Maximum Available Control Technology (MACT) standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Since the permit is written in a de minimis-friendly manner, area source provisions of the MACT requirements may apply to facility engines.

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. Yellowstone 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. Yellowstone has a PTE greater than 15 tons per year of 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. Yellowstone 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. Yellowstone submitted an affidavit of publication of public notice for the June 17, 2009, issue of the *Billings Gazette*, a newspaper of general circulation in the Town of Billings in Yellowstone 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 Yellowstone 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 (PM_{10}) in a serious PM_{10} 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 #4434-00 for Yellowstone, 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 PM_{10} nonattainment area.

   d. This facility is subject to current NSPS (40 CFR 60, Subpart OOO and 40 CFR 60, Subpart IIII).

   e. This facility is potentially 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 or 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 Yellowstone will be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or modified source. Yellowstone 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.

A. Fugitive Emissions and Crushing/Screening Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing/screening operation. These two control methods are water and

chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. Yellowstone may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Yellowstone shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Also, Yellowstone shall not cause or authorize to be discharged into the atmosphere from any affected screens, conveyor transfers, or other NSPS-affected equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Yellowstone shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

Yellowstone must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Yellowstone is required to have water spray bars and water available on site at all times and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Yellowstone may also use chemical dust suppression, in order to maintain compliance with emission limitations. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operation.

B. Diesel-Powered Engine

Due to the limited amount of emissions produced by the diesel-powered engine and the lack of readily available, cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel engine.

In addition, the existing engine is required to comply with the federal engine emission limitations including either EPA Tier 2 emission standards for non-road engines (40 CFR Part 1039) and New Source Performance Standard emission limitations for stationary engines (40 CFR 60, Subpart IIII).

The control options required for the proposed crushing/screening facility are comparable to other recently permitted similar sources, and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

CONTROLLED	**tons/year**					
Emission Source	**PM**	**PM10**	**NOx**	**CO**	**VOC**	**SO2**
275 hp Diesel Engine	2.65	2.65	37.34	8.05	3.03	2.47
150 TPH Jaw Crusher	0.79	0.35	--	--	--	--
Storage Piles	1.08	0.51	--	--	--	--
Transfer Points	0.28	0.09	--	--	--	--
Haul Roads	5.68	1.57	--	--	--	--
Total Emissions	**10.48**	**5.17**	**37.34**	**8.05**	**3.03**	**2.47**

Aggregate Storage Piles

Maximum Process Rate = 150 ton/hr (Maximum plant process rate)
Maximum Hours of Operation = 8,760 hrs/yr
Number of Piles = 1 piles

PM Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00330 lb/ton
Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
Control Efficiency = 50% (Water or chemical spray)
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) = 2.17 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = 1.08 ton/yr

PM10 Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00156 lb/ton
Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
Control Efficiency = 50% (Water or chemical spray)
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) = 1.02 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = 0.51 ton/yr

Aggregate Storage Piles

Maximum Process Rate = 150 ton/hr (Maximum plant process rate)
Maximum Hours of Operation = 8,760 hrs/yr
Number of Piles = 1 piles

PM Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00330 lb/ton
Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
Control Efficiency = 50% (Water or chemical spray)
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) = 2.17 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = 1.08 ton/yr

PM10 Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00156 lb/ton
Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
Control Efficiency = 50% (Water or chemical spray)
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) = 1.02 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) = 0.51 ton/yr

Conveyor Transfer Point (SCC 3-05-020-06)

Maximum Process Rate = 150 ton/hr (Maximum plant process rate)
Maximum Hours of Operation = 8,760 hrs/yr
Number of Transfers = 3 transfer (Company Information)

Total PM Emissions:
Emission Factor = 0.00014 lb/ton (0.0030 uncontrolled, 0.00014 controlled, AP 42, Table 11.19.2-2, 8/04)
Control Efficiency = 0%
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (3 transfer) = 0.28 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (3 transfer) * (1 - 0/100) = 0.28 ton/yr

Total PM10 Emissions:
Emission Factor = 0.000046 lb/ton (0.00110 uncontrolled, 0.000046 controlled, AP 42, Table 11.19.2-2, 8/04)
Control Efficiency = 0%
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (3 transfer) = 0.09 ton/yr
Calculation: (150 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (3 transfer) * (1 - 0/100) = 0.09 ton/yr

Haul Roads
Vehicle Miles Traveled (VMT) per Day = 5 VMT/day (Estimate)
VMT per hour = (5 VMT/day) * (day/24 hrs) = 0.21 VMT/hr
Hours of Operation = 8,760 hrs/yr

PM Emissions:
Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.
Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
Control Efficiency = 50% (Water spray or chemical dust suppressant)
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) = 11.37 tons/yr (Uncontrolled Emissions)
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-50/100) = 5.68 tons/yr (Apply 50% control efficiency)

PM10 Emissions:
Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.
Emission Factor = k * (s / 12)^a * (W / 3)^b = 3.43 lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
Control Efficiency = 50% (Water spray or chemical dust suppressant)
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) = 3.13 tons/yr (Uncontrolled Emissions)
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-50/100) = 1.57 tons/yr (Apply 50% control efficiency)

Diesel Engine

Note: Emissions are based on the power output of the engine (275 hp).
Operational Capacity of Engine = 275 hp
Hours of Operation = 8,760.00 hours

PM Emissions:

PM Emissions = 2.65 ton/yr (Assume PM = PM10)
PM Emissions = 5,299.80 lbs/yr (Assume PM = PM10)

PM-10 Emissions:

Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (275 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 2.65 ton/yr
Calculation: (8,760 hours) * (275 hp) * (0.0022 lbs/hp-hr) = 5,299.80 lbs/yr

NOx Emissions:

Emission Factor = 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (275 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 37.34 ton/yr
Calculation: (8,760 hours) * (275 hp) * (0.031 lbs/hp-hr) = 74,679.00 lbs/yr

CO Emissions:

Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (275 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 8.05 ton/yr
Calculation: (8,760 hours) * (275 hp) * (0.00668 lbs/hp-hr) = 16,092.12 lbs/yr

VOC Emissions:

Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
Calculation: (8,760 hours) * (275 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 3.03 ton/yr
Calculation: (8,760 hours) * (275 hp) * (0.0025141 lbs/hp-hr) = 6,056.47 lbs/yr

SOx Emissions:

Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (275 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 2.469 ton/yr
Calculation: (8,760 hours) * (275 hp) * (0.00205 lbs/hp-hr) = 4,938.45 lbs/yr

V. Air Quality Impacts

MAQP #4434-00 is issued for the operation of a portable crushing plant. MAQP #4434-00 will cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minimal and temporary. The Department determined that the impact 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, based on ambient air modeling, that the impact 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.

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

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

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: Yellowstone County
3321 King Ave. E.
Billings, MT 59101

Montana Air Quality Permit number: 4434-00

Preliminary Determination Issued: 7/14/2009
Department Decision Issued: 8/03/2009
Permit Final: 8/19/2009

1. *Legal Description of Site*: Yellowstone submitted an application to operate a portable crushing facility. MAQP #4434-00 would apply while operating at any location in Montana, except those areas considered to be tribal lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. An addendum to this permit would be required if Yellowstone intends to locate in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana*

2. *Description of Project*: The Department received a permit application for the operation of a portable crushing facility with a maximum rated throughput of 150 TPH and diesel-powered engine up to 275 hp. Yellowstone proposes to operate this plant to crush rock into specific sized gravel.

3. *Objectives of Project*: The object of the project would be to produce business and revenue for the company through the sale and use of gravel. The issuance of MAQP #4434-00 would allow Yellowstone to operate the permitted equipment 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 MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Yellowstone 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 #4434-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to 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 may use the same area as the crushing operation. The proposed project would be considered a minor source of emissions by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result 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 (with seasonal and intermittent operations) and only minor amounts of 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 and temporary effects to aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the surrounding roadways, at areas of operation, and pollution control for equipment operations. However, pollutant deposition and water use would cause minor impacts as the facility would be small with seasonal and intermittent operations and only a small volume of water would be used. Overall, the equipment would be expected to have minor impacts to water quality, quantity, and distribution in the area of operations.

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 aggregate crushing. Therefore, impacts from the emissions from the crushing facility would be expected to be minor.

The crushing 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 aggregate crushing, impacts from the emissions from the crushing facility would be minor.

As described in Section 7.F of this EA, 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. Also, because the water usage is minimal, as described in Section 7.B, and the associated soil disturbance is minimal, as described in Section 7.C, corresponding vegetative impacts would be minor.

E. Aesthetics

The crushing operation would be visible and would create additional noise while operating in these areas. However, MAQP #4434-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing operation would be portable, would 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 crushing operations would be minor because the facility would be relatively small. MAQP #4434-00 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 #4434-00 would limit total emissions from the crushing operation and any additional Yellowstone equipment operated at the site to 250 tons per year or less, excluding fugitive emissions.

This facility would be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening operation would be minimal because the pollutants emitted would be well controlled, and would have minimal deposition on the surrounding area. Therefore, air quality impacts would 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 (Section 26, Township 5 North, and Range 33 West, in Yellowstone County, Montana). Search results concluded there are 5 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.

Species of special concern inhabiting the area surrounding the proposed project site includes the *Haliaeetus leucocephalus* (Bald Eagle), *Centrocercus urophasianus* (Greater Sage-Grouse), *Athene cuniculus* (Burrowing Owl), *Sander Canadensis* (Sauger), *Apalone spineifera* (Spiny Softshell), and *Ipomoea leptophylla* (Bush morning-glory).

The species of special concern that have been identified as being within the defined area have been generalized from many miles of potential habitat. 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 temporary, seasonal, and relatively small industrial size of the operation, any impact would be minor and short-lived. In addition, initial and typical operations would take place within a previously disturbed industrial location further limiting the potential for impact to any unique endangered, fragile, or limited environmental resource in any proposed location of operation.

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

Due to the size of the facility, the crushing operation would require only small quantities of water, air, and energy for proper operation. Relatively small quantities of water would be used for dust suppression and would control particulate emissions being generated at the site. Energy requirements would also be small because the energy demands of the crushing operation would be relatively small and the facility would not be used continuously. The facility would be expected to have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be dispersed. Therefore, any impacts to water, air, and energy resources in any given area would be minor.

I. Historical and Archaeological Sites

According to correspondence with the Montana State Historic Preservation Office (SHPO), there have been no previously recorded sites within the designated search locales. The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area.

As long as there will be no disturbance or alteration to structures over 50 years of age SHPO indicated there would be a low likelihood of disturbance to any known archaeological or historic site given that the facility would typically be locating in previously disturbed areas. Therefore, it is unlikely that the project would affect any known historic or archaeological site and any impacts would be minor.

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 of PM and PM_{10}. 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 equipment operations owned by Yellowstone at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human 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 proposed project would cause only minor disruption to the social structures and mores in the area because the source would be a minor industrial source, and would only have temporary and intermittent operations.

B. Cultural Uniqueness and Diversity

The predominant use of any proposed area would be expected to remain the same. The cultural uniqueness and diversity of any area would have only minor, if any, effects imparted by the operation of this facility. This facility would be portable with seasonal and intermittent operations. Therefore, the cultural uniqueness and diversity of the area would not be expected to be affected. Effects, if any, would be minor.

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 because the proposed project would require very few employees. In addition, only minor amounts of construction would be required to complete the project, and the facility would be a minor industrial facility with temporary, seasonal, and intermittent operations.

D. Agricultural or Industrial Production

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

E. Human Health

Conditions would be incorporated into the permit to ensure that the crushing facility would operate in compliance with all applicable air quality rules and standards, including New Source Performance 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. Further, the facility would operate on a temporary, intermittent, and seasonal basis and only minor impacts would be expected on human health from the proposed facility.

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. Air emissions would be minimized as a result of limitations placed in the Montana Air Quality Permit and the temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

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

H. Distribution of Population

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

I. Demands for Government Services

There would be a very small increase in traffic on existing roadways and highways in the area from the proposed project. 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.

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 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 km of a PM_{10} 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 and short-lived.

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 because the source would continue to be portable, and the footprint of the facility would remain relatively small. Further, no other industrial operations are expected to result from this permitting action. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Yellowstone, but properly permitted and operated equipment will ensure any cumulative impacts or secondary impacts would be minor and short-term. In conclusion, the source would be relatively small, the facility emissions would be minimal, and the project would have only minor cumulative and secondary impacts.

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 portable crushing facility. MAQP #4434-00 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: Trista Glazier
Date: June 29, 2009