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

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: June 25, 2010

Name of Applicant: Helena Sand and Gravel, Inc.

Source: Portable Crushing and Screening Operation

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 4555-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by July 26, 2010. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

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

VW:SJ
Enclosures

MONTANA AIR QUALITY PERMIT

Issued To: Helena Sand and Gravel, Inc.
PO Box 5960
Helena, MT 59604-5960

MAQP: #4555-00
Application Complete: 5/28/2010
Preliminary Determination Issued: 6/25/2010
Department's Decision Issued:
Permit Final:
AFS #: 777-4555

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Helena Sand and Gravel, Inc. (HS&G) 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

HS&G proposes to operate a portable crushing and screening operation consisting of the following:

- One (1) Jaw Crusher with a maximum rated capacity of 400 tons per hour (TPH)
- One (1) Cone Crusher with a maximum rated capacity of 350 TPH
- One (1) Cone Crusher with a maximum rated capacity of 265 TPH
- Five (5) Screens, each with a maximum rated capacity of 425 TPH
- One (1) 1,971-horsepower (hp) engine driving a 1,250 kilowatt (kW) generator
- One (1) 150-hp engine driving a 100 kW generator
- One (1) 500 gallon diesel storage tank
- One (1) 10,000 gallon diesel storage tank
- Thirty seven (37) conveyors (some of these conveyors are part of the crushing and screening equipment)
- Associated Equipment such as haul trucks, front loaders, etc.

B. Plant Location

HS&G proposes to operate a portable crushing and screening operation, which will initially be located at Section 19, Township 10 North, Range 2 West in Lewis and Clark County, Montana. However, HS&G has also proposed operations in the Kalispell and Whitefish nonattainment areas. MAQP #4555-00 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. Addendum 1, associated with this permitting action, allows for the winter time operation of the equipment in the Whitefish and Kalispell PM_{10} nonattainment areas, and summer time operation in certain PM_{10} nonattainment areas.

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).

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 6 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 17.8.752).

5. HS&G 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. HS&G 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. HS&G shall not operate more than three crushers. The maximum combined capacity of the crushers shall not exceed 1,015 TPH (ARM 17.8.749).

8. Crushing production shall be limited to 8,891,400 tons during any rolling 12-month time period (ARM 17.8.749)

9. HS&G shall not operate more than five screens. The maximum combined capacity of the screens shall not exceed 2,125 TPH (ARM 17.8.749).

10. Screening production shall be limited to 18,615,000 tons during any rolling 12-month time period (ARM 17.8.749).

11. HS&G shall not operate, or have on-site, more than two diesel generator engines. The maximum rated combined horsepower shall not exceed 2,121 hp (ARM 17.8.749).

12. Operation of the diesel generator engines shall not exceed 3,000 hours of operation each during any rolling 12-month time period (ARM 17.8.749).

13. If the permitted equipment is used in conjunction with any other equipment owned or operated by HS&G, 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).

14. HS&G 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).

15. HS&G shall comply with any 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. HS&G 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. HS&G 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. HS&G 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 HS&G 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. HS&G shall document, by month, the crushing production from the facility. By the 25th day of each month, HS&G 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.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. HS&G shall document, by month, the screening production from the facility. By the 25th day of each month, HS&G shall calculate the screening production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. HS&G shall document, by month, the hours of operation of each of the diesel generator engines. By the 25th day of each month, HS&G shall calculate the total combined hours of operation for the diesel generator engines for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

8. HS&G shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

HS&G shall provide the Department with written notification of the actual start-up date postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – HS&G 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 (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (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 HS&G fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving HS&G 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 HS&G 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. HS&G 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.

Montana Air Quality Permit (MAQP) Analysis
Helena Sand and Gravel, Inc
MAQP #4555-00

I. Introduction/Process Description

Helena Sand and Gravel, Inc. (HS&G) owns and operates a portable crushing and screening plant.

A. Permitted Equipment

HS&G proposes to operate a portable crushing and screening operation consisting of the following equipment:

- One (1) Jaw Crusher with a maximum rated capacity of 400 tons per hour (TPH) (currently a 1997 Cedarapids)
- One (1) Cone Crusher with a maximum rated capacity of 350 TPH (currently a 2006 Nordberg)
- One (1) Cone Crusher with a maximum rated capacity of 265 TPH (currently a 2000 Nordberg)
- Five (5) Screens, each with a maximum rated capacity of 425 TPH (currently three 1997 El-Jay Screens and two 1992 El-Jay Screens)
- One (1) 1,971-horsepower (hp) engine driving a 1,250 kilowatt (kW) generator (currently a Caterpillar 3512)
- One (1) 150-hp engine driving a 100 kW generator (currently a Whisperwatt 125-DCA)
- One (1) 500 gallon diesel storage tank
- One (1) 10,000 gallon diesel storage tank
- Thirty seven (37) conveyors (some of these conveyors are part of the crushing and screening equipment)
- Associated Equipment such as haul trucks, front loaders, etc.

B. Source Description

HS&G proposes to operate this equipment to crush and sort sand and gravel like materials. HS&G would use this crushing/screening plant to crush, screen, and sort sand and gravel like materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crusher, materials are sent to the screen, where they are separated and conveyed to stockpiles.

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. <u>ARM 17.8.101 Definitions</u>. 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).

   HS&G 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 PM_{10}

HS&G 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, HS&G 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). HS&G 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. The provisions of this subpart are applicable to each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station which is determined an affected facility. HS&G is subject to this subpart.

   c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Compression Engines (CI ICE). Owners and operators of stationary 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, or are manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this part. As this permit is written in a de minimis friendly manner, future engines may be subject to this part.

7. ARM 17.8.342 Emissions 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 a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below.

b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Therefore, HS&G is subject to this subpart.

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. HS&G 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 MAQP 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. HS&G has a PTE greater than 15 tons per year of particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM_{10}), oxides of nitrogen (NO_x), and carbon monoxide (CO); therefore, an MAQP 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. HS&G 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. HS&G submitted an affidavit of publication of public notice for the May 16, 2010, issue of the *Independent Record*, a newspaper of general circulation in the Town of Helena in Lewis and Clark 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 MAQPs 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 HS&G 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 MAQP 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 MAQP 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 MAQP 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 MAQP 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 MAQP 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 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 #4555-00 for HS&G, 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).

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 or a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

HS&G requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations; 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.

h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.

ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

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

III. BACT Determination

A BACT determination is required for each new or modified source. HS&G 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 Generator Engines:

Any new diesel engine would likely be required to comply with the 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 compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards constitutes BACT for these engines.

Crushing and Screening and Fugitive Emissions:

HS&G is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to control particulate emissions. Furthermore, HS&G is potentially required to comply with 40 CFR 60, Subpart OOO containing opacity limitations. The Department determined that using water spray bars, as proposed by the applicant, to maintain compliance with 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

Potential To Emit in Tons Per Year Helena Sand and Gravel, Inc. MAQP #4555-00							
Source	**PM**	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**CO**	**SO_X**	**VOC**
400 TPH Jaw Crusher	2.10	0.95	0.18				
350 TPH Cone Crusher	1.84	0.83	0.15				
265 TPH Cone Crusher	1.39	0.63	0.12				
425 TPH Screens (5)	20.48	6.89	0.47				
Generator Engines	7.00	7.00	7.00	98.63*	21.25	6.52	8.00
Transfer Points	5.47	1.80	0.51				
Piles	13.78	6.52	0.99				
Raw Material Unloading	0.03	0.03	neg				
Haul Roads	5.49	1.51	0.15				
Fuel Storage							neg
TOTAL:	**57.59**	**26.15**	**9.56**	**98.63**	**21.25**	**6.52**	**8.00**

Emissions Inventory and Calculation Notes:

*Inventory reflects enforceable limits on hours of operation of the generator engines only, to keep emissions below the Title V threshold of 100 tons per year of NO_X; the allowable emissions remain at or above 80 tons per year.

CO = carbon monoxide
hp = horsepower
hr = hour
neg = negligible
NO_X = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_X = oxides of sulfur
TPH = ton per hour
VOC = volatile organic compounds
VMT = vehicle miles traveled
yr = year

1997 Cedarapids Jaw Crusher

Maximum Capacity:	400	ton/hr	(MAQP 4555-00 Application)
Hours of Operation:	8760	hr/yr	

PM Emissions

Emissions Factor:	0.0012	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.0012lb/ton*400ton/hr*8760hr/yr=		4204.80	lb/yr
	4204.8lb/yr*0.0005 ton/lb =		**2.10**	**ton/yr**

PM_{10} Emissions

Emissions Factor:	0.00054	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.00054lb/ton*400ton/hr*8760hr/yr=		1892.16	lb/yr
	1892.16lb/yr*0.0005 ton/lb =		**0.95**	**ton/yr**

$PM_{2.5}$ Emissions

Emissions Factor:	0.0001	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)

Calculations:	0.0001lb/ton*400ton/hr*8760hr/yr=	350.40	lb/yr
	350.4lb/yr*0.0005 ton/lb =	**0.18**	**ton/yr**

2006 Nordberg HP-400 Cone Crusher

Maximum Capacity:	350	ton/hr	(MAQP 4555-00 Application)
Hours of Operation:	8760	hr/yr	

PM Emissions

Emissions Factor:	0.0012	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.0012lb/ton*350ton/hr*8760hr/yr=	3679.20	lb/yr
	3679.2lb/yr*0.0005 ton/lb =	**1.84**	**ton/yr**

PM_{10} Emissions

Emissions Factor:	0.00054	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.00054lb/ton*350ton/hr*8760hr/yr=	1655.64	lb/yr
	1655.64lb/yr*0.0005 ton/lb =	**0.83**	**ton/yr**

$PM_{2.5}$ Emissions

Emissions Factor:	0.0001	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.0001lb/ton*350ton/hr*8760hr/yr=	306.60	lb/yr
	306.6lb/yr*0.0005 ton/lb =	**0.15**	**ton/yr**

2000 Nordberg HP-400 Cone Crusher

Maximum Capacity:	265	ton/hr	(MAQP 4555-00 Application)
Hours of Operation:	8760	hr/yr	

PM Emissions

Emissions Factor:	0.0012	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.0012lb/ton*265ton/hr*8760hr/yr=	2785.68	lb/yr
	2785.68lb/yr*0.0005 ton/lb =	**1.39**	**ton/yr**

PM_{10} Emissions

Emissions Factor:	0.00054	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.00054lb/ton*265ton/hr*8760hr/yr=	1253.56	lb/yr
	1253.556lb/yr*0.0005 ton/lb =	**0.63**	**ton/yr**

$PM_{2.5}$ Emissions

Emissions Factor:	0.0001	lb/ton	(AP-42 Table 11.19.2-2, 08/2004)
Calculations:	0.0001lb/ton*265ton/hr*8760hr/yr=	232.14	lb/yr
	232.14lb/yr*0.0005 ton/lb =	**0.12**	**ton/yr**

1997 and 1992 El Jay Screens

Maximum Capacity:	425	TPH	(MAQP 4555-00 Application)
Hours of Operation:	8760	hr/yr	

PM Emissions

Emissions Factor:	0.0022 lb/ton		
Calculations:	0.0022lb/ton*425TPH*8760hr/yr*5 =	40953.00	lb/yr
	40953lb/yr*0.0005 ton/lb =	**20.48**	**ton/yr**

PM_{10} Emissions

Emissions Factor:	0.00074 lb/ton		
Calculations:	0.00074lb/ton*425TPH*8760hr/yr*5=	13775.10	lb/yr
	13775.1lb/yr*0.0005 ton/lb =	**6.89**	**ton/yr**

$PM_{2.5}$ Emissions

Emissions Factor:	0.00005 lb/ton		
Calculations:	0.00005lb/ton*425TPH*8760hr/yr*5=	930.75	lb/yr
	930.75lb/yr*0.0005 ton/lb =	**0.47**	**ton/yr**

Generator Engines

Maximum Capacity:	2121	hp
Hours of Operation:	**3000**	**hr/yr**

PM, PM_{10}, and $PM_{2.5}$ Emissions:
*note: All PM Emissions are assumed to be PM_{10} and $PM_{2.5}$ Emissions

Emissions Factor:	0.0022 lb/hp-hr		
Calculations:	0.0022lb/hp-hr*2121hp*3000hr/yr=	13998.6	lb/yr
	13998.6lb/yr*0.0005 ton/lb =	**7.00**	**ton/yr**

NO_X Emissions:

Emissions Factor:	0.031 lb/hp-hr		
Calculations:	0.031lb/hp-hr*2121hp*3000hr/yr=	197253	lb/yr
	197253lb/yr*0.0005 ton/lb =	**98.63**	**ton/yr**

CO Emissions:

Emissions Factor:	0.00668 lb/hp-hr		
Calculations:	0.00668lb/hp-hr*2121hp*3000hr/yr=	42504.84	lb/yr
	42504.84lb/yr*0.0005 ton/lb =	**21.25**	**ton/yr**

SO_X Emissions:

Emissions Factor:	0.00205 lb/hp-hr		
Calculations:	0.00205lb/hp-hr*2121hp*3000hr/yr=	13044.15	lb/yr
	13044.15lb/yr*0.0005 ton/lb =	**6.52**	**ton/yr**

VOC Emissions:

Emissions Factor:	0.0025141 lb/hp-hr		
Calculations:	0.0025141lb/hp-hr*2121hp*3000hr/yr=	15997.22	lb/yr
	15997.2183lb/yr*0.0005 ton/lb =	**8.00**	**ton/yr**

Transfer Points

Maximum Capacity:	425	TPH
Hours of Operation:	8760	hr/yr
Number of Transfers:	21	transfers

PM Emissions:

Emissions Factor:	0.00014	lb/ton		
Calculations:	0.00014lb/ton*425TPH*8760hr/yr=		521.22	lb/yr-transfer
	521.22lb/yr-transfer*21transfers*0.0005ton/lb =		**5.47**	**ton/yr**

PM_{10} Emissions:

Emissions Factor:	0.000046	lb/ton		
Calculations:	0.000046lb/ton*425TPH*8760hr/yr=		171.258	lb/yr-transfer
	171.268lb/yr-transfer*21transfers*0.0005ton/lb =		**1.80**	**ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	0.000013	lb/ton		
Calculations:	0.000013lb/ton*425TPH*8760hr/yr=		48.399	lb/yr-transfer
	48.399lb/yr-transfer*21transfers*0.0005ton/lb =		**0.51**	**ton/yr**

Haul Roads

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

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

s =	7.1	% (AP-42 Table 13.2.2-1, 11/2006)	
k =	0.15	for $PM_{2.5}$	(AP-42 Table 13.2.2-2, 11/2006)
	1.5	for PM_{10}	
	4.9	for PM	
W =	50	estimated	
a =	0.9	$PM_{2.5}$ and PM_{10}	
	0.7	PM	
b =	0.45		
VMT =	5	VMT	standard estimate

PM Emissions

Emissions Factor:	12.04	lb/VMT	PM	
Calculations:	12.035994738732lb/VMT*5VMT=		60.18	lb/day
	60.18lb/day*0.0005 ton/lb*365day/yr =		10.98	ton/yr
	10.9828451990929ton/yr*50% control factor =		**5.49**	**ton/yr**

PM_{10} Emissions

Emissions Factor:	3.32	lb/VMT		
Calculations:	3.31735988588915lb/VMT*5VMT=		16.5868	lb/yr
	16.5868lb/yr*0.0005 ton/lb*365day/yr=		3.027091	ton/yr
	3.02709089587385ton/yr*50% control factor =		**1.51**	**ton/yr**

$PM_{2.5}$ Emissions

Emissions Factor:	0.331736 lb/VMT		
Calculations:	0.331735989lb/VMT*5VMT=	1.65868	lb/yr
	1.65868lb/yr*0.0005 ton/lb*365day/yr=	0.302709	ton/yr
	0.3027090899625ton/yr*50% control factor =	**0.15**	**ton/yr**

Raw Material Handling

400 TPH unloaded for Cedarapids Jaw Crusher
Hours of operation: 8760 hr/yr

PM_{10} Emissions

Emissions Factor:	0.000016 lb/ton		
Calculations:	0.000016lb/ton*400 ton/hr*8760hr/yr=	56.064	lb/yr
	56.064lb/yr*0.0005 ton/lb =	**0.03**	**ton/yr**

PM Emissions: no data available, =/> 0.03
$PM_{2.5}$ Emissions: no data, <0.03

Pile Emissions
These calculations account for
1. Loading of aggregate onto storage piles (batch or continuous drop operations).
2. Equipment traffic in storage area.
3. Wind erosion of pile surfaces and ground areas around piles.
4. Loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operations).

*For calculations, one pile at max process rate accounts for the product piles from screen w/ moisture carry over
Reapplication of water on the piles may be required to maintain the moisture content

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

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	PM_{30}
	0.35	PM_{10}
	0.053	$PM_{2.5}$
U =	9.1	MPH
M =	1.55	avg moisture content, AP-42 Table 11.19.2-1 Note b

PM Emissions:

Emissions Factor:	0.0074 lb/ton		
Calculations:	0.0074lb/ton*425TPH*8760hr/yr=	27561.93	lb/yr
	27561.931899041lb/yr*0.0005ton/lb =	**13.78**	**ton/yr**

PM_{10} Emissions:

Emissions Factor:	0.0035 lb/ton		
Calculations:	0.0035lb/ton*425TPH*8760hr/yr=	13036.05	lb/yr
	13036.048871168lb/yr*0.0005ton/lb =	**6.52**	**ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	0.0005 lb/ton		
Calculations:	0.0005lb/ton*425TPH*8760hr/yr=	1974.03	lb/yr
	1974.03025763402lb/yr*0.0005ton/lb =	**0.99**	**ton/yr**

Fuel Storage

Example was estimated at 1.62 lb/yr based on a typical 10,000 gallon horizontal fuel tank using TANKS 4.0.9d, with 3 turnovers per year

Example Calculations:	1.62 lb/yr * 0.0005 ton/lb =	**0.00081**	**ton/yr**

V. Existing Air Quality

The original location of this portable operation is a location which is classified as attainment/unclassifiable for all criteria pollutants for which this operation emits. Operation in certain PM_{10} nonattainment areas is permitted under the operating conditions of Addendum 1 to this permit.

VI. Air Quality Impacts

MAQP #4555-00 will cover the plant while operating at any location within Montana except those areas having a Department-approved permitting program and areas considered tribal lands. Addendum 1 applies for areas in or within 10 km of certain PM_{10} nonattainment areas. The amount of allowable emissions by this facility is not expected to exceed any set ambient air quality standard. In addition, this source is portable in nature and any air quality impacts would be expected to be temporary. The Department determined that the impact from this permitting action would be expected to 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	
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.

Addendum 1
Helena Sand and Gravel, Inc.
Montana Air Quality Permit (MAQP) #4555-00

An addendum to Montana Air Quality Permit #4555-00 is hereby granted to Helena Sand and Gravel, Inc. (HS&G) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

HS&G owns and operates a portable non-metallic mineral processing facility. The equipment consists of:

- One (1) Jaw Crusher with a maximum rated capacity of 400 tons per hour (TPH)
- One (1) Cone Crusher with a maximum rated capacity of 350 TPH
- One (1) Cone Crusher with a maximum rated capacity of 265 TPH
- Five (5) Screens, each with a maximum rated capacity of 425 TPH
- One (1) 1,971-horsepower (hp) engine driving a 1,250 kilowatt (kW) generator
- One (1) 150-hp engine driving a 100 kW generator
- One (1) 500 gallon diesel storage tank
- One (1) 10,000 gallon diesel storage tank
- Thirty seven (37) conveyors (some of these conveyors are part of the crushing and screening equipment)
- Associated Equipment such as haul trucks, front loaders, etc.

II. Seasonal and Site Restrictions

Addendum 1 applies to the HS&G facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

A. During the winter season (October 1-March 31) – The only location in or within 10 km of a PM_{10} nonattainment area where HS&G may operate is:

1. Section 36, Township 30 North, Range 21West and Section 23, Township 29 North, Range 22 West
2. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).

B. During the summer season (April 1-September 30) – HS&G may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM_{10} nonattainment areas.

C. HS&G shall comply with the limitations and conditions contained in Addendum 1 to MAQP #4555-00 while operating in or within 10 km of any of the previously identified PM_{10} nonattainment areas. Addendum 1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Limitations and Conditions – **Summer Season**

1. Water spray bars must be available and operated, as necessary**,** on the crushers, screens, and all transfer points whenever the crushing/screening plant is in operation (ARM 17.8.749).

2. HS&G shall not cause or authorize to be discharged into the atmosphere from any equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749). For NSPS-affected equipment constructed after April 22, 2008 for which an opacity limitation of 7% applies (such as screens and conveyors), that 7% limit shall apply to the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

3. HS&G shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

4. HS&G shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

5. HS&G shall not operate, or have on-site, more than three crushers at any one time. Total crusher production shall not exceed 24,360 tons per day (ARM 17.8.749).

6. HS&G shall not operate, or have on-site, more than five screens at any one time. Total screen production shall not exceed 51,000 tons per day (ARM 17.8.749).

7. HS&G shall not operate or have on-site more than two diesel engines/generators. The maximum combined capacity of the engines that drive the generators shall not exceed 2,121 hp (ARM 17.8.749).

8. Operation of each of the diesel engines driving the generators shall not exceed 8.2 hours per day (ARM 17.8.749).

B. Operational Limitations and Conditions – **Winter Season**

1. Water spray bars must be available and operated, as necessary**,** on the crushers, screens, and all transfer points whenever the crushing/screening plant is in operation (ARM 17.8.749).

2. HS&G shall not cause or authorize to be discharged into the atmosphere from any equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749). For NSPS-affected equipment constructed after April 22, 2008 for which an opacity limitation of 7% applies (such as screens and conveyors), that 7% limit shall apply to the affected equipment. (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

3. HS&G shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

4. HS&G shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

5. HS&G shall not operate, or have onsite, more than three crushers at any one time. Total crusher production shall not exceed 10,657 tons per day (ARM 17.8.749).

6. HS&G shall not operate, or have onsite, more than five screens at any one time. Total screen production shall not exceed 22,312 tons per day (ARM 17.8.749).

7. HS&G shall not operate or have on-site more than two diesel engines/generators. The maximum combined capacity of the engines that drive the generators shall not exceed 2,121 hp (ARM 17.8.749). Only one engine shall have a capacity greater than 600 hp, with that engine having a maximum capacity of 1,971 hp, and exhaust characteristics as modeled including (ARM 17.8.749):

    a. two stacks with a minimum stack height of 17 ft from ground level each
    b. a specified nominal stack diameter of not less than 7 inches for each stack

8. Operation of each of the diesel engines driving the generators shall not exceed 8 hours per day (ARM 17.8.749).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another nonattainment 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. Production information for the sites covered by this addendum must be maintained for 5 years and submitted to the Department upon request. The information must include (ARM 17.8.749):

    a. Daily tons of material crushed by each crusher at each site (including amount of recirculated/rerun material). HS&G shall document, by day, the total crushing production. HS&G shall sum the total crushing production for the previous day to demonstrate compliance with the limitations in Section III.A.5 and Section III.B.5.

    b. Daily tons of material screened by each screen at each site (including amount of recirculated/rerun material). HS&G shall document, by day, the total screening production. HS&G shall sum the total screening production for the previous day to demonstrate compliance with the limitations in Section III.A.6 and Section III.B.6.

    c. Daily tons of bulk material loaded at each site (production)

    d. Daily hours of operation at each site

    e. Daily hours of operation and the hp for each engine at each site

    f. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles

    g. Summary of application of water or chemical dust suppression to control fugitive dust emissions from plant vehicle traffic

Addendum 1 Analysis
Helena Sand and Gravel, Inc.
Montana Air Quality Permit (MAQP) #4555-00

I. Permitted Equipment

Helena Sand and Gravel, Inc. (HS&G) owns and operates a portable non-metallic mineral processing facility consisting of the following equipment:

- One (1) Jaw Crusher with a maximum rated capacity of 400 tons per hour (TPH) (currently a 1997 Cedarapids)
- One (1) Cone Crusher with a maximum rated capacity of 350 TPH (currently a 2006 Nordberg)
- One (1) Cone Crusher with a maximum rated capacity of 265 TPH (currently a 2000 Nordberg)
- Five (5) Screens, each with a maximum rated capacity of 425 TPH (currently three 1997 El-Jay Screens and two 1992 El-Jay Screens)
- One (1) 1,971-horsepower (hp) engine driving a 1,250 kilowatt (kW) generator (currently a Caterpillar 3512)
- One (1) 150-hp engine driving a 100 kW generator (currently a Whisperwatt 125-DCA)
- One (1) 500 gallon diesel storage tank
- One (1) 10,000 gallon diesel storage tank
- Thirty seven (37) conveyors (some of these conveyors are part of the crushing and screening equipment)
- Associated Equipment such as haul trucks, front loaders, etc.

II. Source Description

HS&G uses this crushing/screening plant to crush, screen, and sort sand and gravel like materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crusher, materials are sent to the screen, where they are separated and conveyed to stockpiles.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the 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 locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

A. ARM 17.8.749 Conditions for Issuance 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.

B. ARM 17.8.764 Administrative Amendment to Permit. An MAQP 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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

C. ARM 17.8.765 Transfer of Permit. An MAQP may be transferred from one location to another if:

1. Written notice of intent to transfer location and proof of public notice are sent to the Department;
2. The source will operate in the new location for a period of less than 1 year; and
3. The source will not have any significant impact on any nonattainment area or any Class I area.

IV. Emission Inventory

Potential To Emit in Pounds per Day Helena Sand and Gravel, Inc. MAQP #4555-00 – Summer Season Nonattainment Areas							
Source	PM	PM_{10}	$PM_{2.5}$	NO_X	CO	SO_X	VOC
400 TPH Jaw Crusher	11.52	5.18	0.96				
350 TPH Cone Crusher	10.08	4.54	0.84				
265 TPH Cone Crusher	7.63	3.43	0.64				
425 TPH Screens (5)	22.44	7.55	0.51				
Generator Engines	38.35	38.35	38.35	540.42	116.45	35.74	43.83
Transfer Points	29.99	9.85	2.78				
Piles	75.51	35.72	5.41				
Raw Material Unloading	0.16	0.15	neg				
Haul Roads	30.09	8.29	0.83				
Fuel Storage							neg
TOTAL	**225.78**	**113.07**	**50.32**	**540.42**	**116.45**	**35.74**	**43.83**

Potential To Emit in Pounds per Day Helena Sand and Gravel, Inc. MAQP #4555-00 – Winter Season Nonattainment Area							
Source	PM	PM_{10}	$PM_{2.5}$	NO_X	CO	SO_X	VOC
400 TPH Jaw Crusher	5.04	2.27	0.42				
350 TPH Cone Crusher	4.41	1.98	0.37				
265 TPH Cone Crusher	3.34	1.50	0.28				
425 TPH Screens (5)	9.82	3.30	0.22				
Generator Engines	37.33	37.33	37.33	526.01	113.35	34.78	42.66
Transfer Points	13.12	4.31	1.22				
Piles	33.04	15.63	2.37				
Raw Material Unloading	0.07	0.07	neg				
Haul Roads	13.16	3.63	0.36				
Fuel Storage							neg
TOTAL	**119.32**	**70.02**	**42.57**	**526.01**	**113.35**	**34.78**	**42.66**

MODELED EACH STACK AND SUMMED IMPACTS

Modeling Inputs

Stack Diameter:	*0.583333*	ft	MAQP 4555-00 Application (each stack)
Stack Height:	*17*	ft	agreed condition
Exit Gas Temp:	*850*	°F	MAQP 4555-00 Application
Exit Gas Flowrate:	*8000*	ACFM	MAQP 4555-00 Application (each stack)

Emissions Rate:

1,971 hp Engine

Maximum Capacity:	1971	hp	
Hours/day:	8	hr/day	agreed condition

PM_{10} Emissions:

*note: All PM Emissions are assumed to be PM_{10} and $PM_{2.5}$ Emissions

Emissions Factor:	0.0022	lb/hp-hr		
Calculations:	0.0022lb/hp-hr*1971hp*8hr/day=		34.6896	lb/day
	34.6896lb/day*1day/24hr =		1.4454	lb/hr
	1.4454lb/hr/2 stacks =		*0.7227*	lb/day

Maximum 1-hr Modeled Impact:	6.189	ug/m^3 @ 131 meters
Combined 1-hr Impact:	12.378	ug/m^3 @ 131 meters
Combined 24-hr impact:	**4.9512**	ug/m^3 @ 131 meters

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}). Due to exceedances of the national standards for PM_{10}, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM_{10}. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM_{10} State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM_{10} emissions.

MAQP #4555-00 and Addendum 1 are for a portable crushing/screening plant that will locate at sites in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

MAQP #4555-00 and Addendum 1 will cover the operations of this portable crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum 1 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of the Kalispell and Whitefish PM_{10} nonattainment areas (specific site during the winter months (October 1 through March 31). Additionally, the facility will also be allowed to operate in or within 10 km of certain PM_{10} nonattainment areas during the summer months (April 1 through September 30).

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a 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.

VIII. Environmental Assessment

The current permit action is an administrative amendment and does not constitute a state action; therefore, an environmental assessment is not required for the proposed project.

Addendum Analysis Prepared by: Shawn Juers
Date: 06/11/2010

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

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Helena Sand and Gravel, Inc.

Montana Air Quality Permit number: 4555-00

Preliminary Determination Issued: 6/25/2010
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: Section 19, Township 10 North, Range 2 West in Lewis and Clark County, Montana

2. *Description of Project*: HS&G proposes to operate a portable crushing and screening plant

3. *Objectives of Project*: The objectives of the project are to crush and sort sand and gravel like materials for various uses.

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 HS&G 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 #4555-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			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 crushing and screening operation. The proposed project would be considered a minor source of emissions by industrial standards. Limitations and conditions would be placed in MAQP #4555-00 to minimize these emissions. Minor effects on terrestrial life would be expected.

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. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Furthermore, this project would typically operate in an area designated for such activities. 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 expected to 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 relatively small amounts of water for pollution control, and would be expected to 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 allowable 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 #4555-00 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 area designated for such activities, any visual and noise impacts would be expected to be minor and short-lived.

F. Air Quality

The air quality impacts from the crushing and screening operation would be expected to be minor because the facility would be relatively small and be required to operate using appropriate air pollution controls. MAQP #4555-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars as necessary to control air pollution. Furthermore, 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

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, allowable emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

MAQP #4555-00 and Addendum #1 would cover the proposed crushing/screening operation while located at various locations throughout the state. Most operations would be expected to take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts to the industrial area. Further, given the temporary and portable nature of the operations, any impacts would be expected to be minor and short-lived. In addition, operational conditions and limitations in MAQP #4555-00 and Addendum #1 would be protective of these resources by limiting overall impacts to the surrounding environment.

The Department has previously contacted the Montana Natural Heritage Program (MNHP) to identify species of special concern that may be found in the area where the proposed plant would initially locate. Search results concluded that there were 3 species of concern in the area. The area, in this case, was defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The species of special concern were the gray wolf, the bald eagle, and the wedge-leaved saltbush.

Since the gray wolf is regional, it is unlikely that the installation of the crushing and screening equipment would have any impact on these animals, as this site already contains industrial activity. Likewise, the bald eagle should not be impacted since it is primarily a species of riparian habitats, although it can have a range of several miles from its nest. The plant is estimated to be outside of Zone III, which represents most of a home range used by eagles during the nesting season. Zone III usually includes all suitable foraging habitat within 2.5 mi (4 km) of all nest sites in the breeding area that have been active within 5 years. Lastly, the saltbush, a vascular plant, covers a region that begins about 1 mile from the area and extends west away from the area. As allowable emissions are limited, and deposition is expected to be minimal, minimal, if any, effects to the saltbush would be expected.

At all locations the crushing/screening operation would typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any location would cause significant additional impacts to unique, endangered, fragile or limited resources given the likelihood of previous industrial disturbance at the given area of operation. Given the temporary and portable nature of the operations, any impacts would be expected to be minor and short-lived. In addition, operational conditions and limitations in the permit would be protective of these resources by limiting overall impacts to the surrounding environment.

Overall, any impacts to the unique endangered, fragile, or limited environmental resources of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be expected to be minor.

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 the total usage would be expected to be relatively small. Energy requirements would be required, and consist mostly of on-site diesel fired generators. Any impacts to water, air, and energy resources in any given area would be expected to be minor.

I. Historical and Archaeological Sites

The Department had previously contacted the State Historic Preservation Office (SHPO) 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. SHPO identified one cultural resource recorded in the area: Site 24LC1062, the Helena Valley Irrigation Canal, located on the northern border of the property. According to the Open Cut Mining Program EA, the canal is located well over 1,000 feet away from the proposed operations area. HS&G is not proposing to discharge any water to the canal or change the drainage patterns, so it is unlikely this resource would be adversely impacted.

Crushing and screening operations generally occur within areas designated for such purposes, such as areas for which an open cut permit has been obtained. There would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the proposed crushing/screening plant would impact any historical or archaeological sites in any given area of operation.

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. The potential impacts to the individual physical and biological considerations above were minor. Collectively, 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 would typically operate in an area designated for crushing and screening activities. Furthermore, the 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 would typically operate in an area designated for such activities. Furthermore, operations are expected to be intermittent and seasonal. Only minor changes in employment would be 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 equipment proposed would not be expected to require any more than a few additional employees.

D. Agricultural or Industrial Production

The equipment would typically operate in areas previously designated and used for crushing/screening operations. The proposed project would have a minor impact on local industrial production since the project would increase air emissions slightly.

Conditions and limitations placed in MAQP #4555-00 would ensure only a minor increase in allowable air emissions, with minimal deposition of air pollutants. Therefore, deposition on the surrounding land and vegetation would be expected to be minor. Any affects to agricultural production would be expected to be minor.

E. Human Health

Conditions would be incorporated into MAQP #4555-00 to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to protect human health. The air emissions from this project would be required to 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 be expected to 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 MAQP and the expected temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

This facility would be a small, portable operation. Therefore, this project would not be expected to have any more than a minor effect to 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.

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 be a small industrial source, and be portable and temporary in nature.

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 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.

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 portable crushing and screening operation. MAQP #4555-00 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: Shawn Juers
Date: 6/11/2010