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

September 10, 2009

Mr. George Schmidt
Schellinger Construction Company, Inc.
P.O. Box 39
Columbia Falls, MT 59912

Dear Mr. Schmidt:

Montana Air Quality Permit #2622-07 is deemed final as of September 9, 2009, by the Department of Environmental Quality (Department). This permit is for the #114 Bull Crusher, nonmetallic mineral crushing and screening plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh

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

Paul Skubinna
Environmental Engineer
Air Resources Management Bureau
(406) 444-6711

VW:PS
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2622-07

Schellinger Construction Company, Inc.
#114 Bull Crusher
P.O. Box 39
Columbia Falls, MT 59912

September 9, 2009

MONTANA AIR QUALITY PERMIT

Issued To:	Schellinger Construction Company, Inc. P.O. Box 39 Columbia Falls, MT 59912	MAQP: #2622-07 Application Complete: 07/08/09 Preliminary Determination Issued: 07/20/09 Department's Decision Issued: 08/24/09 Permit Final: 09/09/09 AFS Number: 777-2622

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

SECTION I: Permitted Facilities

A. Plant Location

Schellinger operates a portable crushing/screening operation that may operate at various locations throughout Montana. The plant will originally be located within the North ½ of Section 21, Township 30 North, Range 21 West in Flathead County; however, MAQP #2622-07 applies while the facility operates at any location within Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns of less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On June 10, 2009, the Department received a permit modification application from Schellinger. The application requested authorization for construction and operation of a 755 horsepower (hp) diesel-fired engine/generator and proposed hours of operation limitations upon the generator to achieve synthetic minor status relative to the Title V Major Source threshold for oxides of nitrogen (NO_x). Schellinger proposed a decrease in hourly crushing production capacity limitations; however, based on the design capacity of the crusher and to maintain enforceablility of the Department did not alter the applicable hourly crushing capacity limitation permit condition(s). Schellinger also proposed increase in hourly screening production capacity limitations to match the design capacity of the screen for the same reasons as listed for the crusher the Department did execute a change to the appropriate screening hourly production capacity limitations. Schellinger proposed removal of the 520 kilowatt (kW) diesel-fired generator from the MAQP and requested revised limitations to operate the proposed engine/generator and other permitted equipment at currently authorized locations that are in or within 10 km of a nonattainment area. Finally, this MAQP modification updates the permit format, language, and rule references to conform to the Department's current permit format, language, and rule references; and, incorporates new and recently modified Federal New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, as applicable.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Schellinger shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Source (NSPS) affected crusher any visible emissions that exhibit an opacity of 15% or greater averaged over 6-consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340 and 40 CFR, Subpart OOO).

3. Schellinger shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

4. Schellinger 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).

5. Schellinger 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.4 (ARM 17.8.752).

6. Water spray bars shall be available and used, 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).

7. The engine/generator used with this facility shall not have a designated capacity greater than 755 hp; and, the hours of operation of the engine/generator shall not exceed 8500 hr during any rolling 12 month period (ARM 17.8.749 and ARM 17.8.1204).

8. Schellinger shall not operate more than one crusher at any given time, and the maximum throughput of the crusher shall not exceed 400 ton per hour (TPH) (ARM 17.8.749).

9. Crushing production is limited to 3,504,000 tons during any rolling 12-month time period (ARM 17.8.749).

10. Schellinger shall not operate more than one screen at any given time, and the maximum capacity of the screen shall not exceed 700 TPH (ARM 17.8.749).

11. Screening production is limited to 6,132,000 tons during any rolling 12-month time period (ARM 17.8.749).

12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Schellinger, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

13. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

14. Schellinger shall comply with all applicable standards and limitations, and the testing, 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 (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. Schellinger 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. Schellinger 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. Schellinger 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 Schellinger 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. Schellinger shall document, by month, the crushing production from the facility. By the 25th day of each month, Schellinger shall calculate the total crushing production of 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.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. Schellinger shall document, by month, the screening production from the facility. By the 25th day of each month, Schellinger shall calculate the total screening production of 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. Schellinger shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Schellinger shall calculate the hours of operation for the diesel engine/generator 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).

8. Schellinger 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

1. Within 30 days of commencement of construction of any NSPS-affected equipment, Schellinger shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A, Subpart OOO and Subpart IIII).

2. Within 15 days of the actual start-up date of any NSPS-affected equipment, Schellinger shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A, Subpart OOO and Subpart IIII).

SECTION III: General Conditions

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Schellinger 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 Schellinger 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. Schellinger 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
Schellinger Construction Company, Inc.
Montana Air Quality Permit (MAQP) #2622-07

I. Introduction/Process Description

This permit applies to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program and those areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

A. Permitted Equipment

Permitted equipment consists of the following and associated equipment:

1.) One portable crusher with a maximum throughput capacity of 400 tons per hour (TPH),
2.) One grizzly feeder screen with a maximum throughput capacity of 700 TPH, and
3.) One 755 horsepower (hp) diesel-fired engine/generator.

B. Source Description

Schellinger Construction Company, Inc. (Schellinger) owns and operates a portable nonmetallic mineral processing crushing and screening operation to crush and sort sand and gravel. For a typical operational setup, unprocessed materials are loaded onto the feeder grizzly screen and conveyed to a jaw crusher. From the jaw crusher, the materials are conveyed to a stockpile. The crushed and sized materials are stockpiled and used for construction operations.

C. Permit History

On March 20, 1990, the Department issued **MAQP #2622-00**. MAQP #2622-00 allowed Schellinger to operate a 1976 Pioneer 30" X 42" portable jaw crusher, a screen, and associated equipment at various locations throughout Montana.

On May 10, 1994, Schellinger filed a Notice of Intent to Transfer Location of Air Quality Permit to transfer their portable jaw crusher, contained in MAQP #2622-00, to the N½ of the NW½ of the SE¼ of Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. The new location was within the Libby particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment area. Therefore, the conditions contained in Schellinger's MAQP #2622-00 were modified and controls were implemented to keep the source's emissions below 547 pounds per day (lbs/day) of PM_{10} emissions. The new conditions and reporting requirements were stated in **Addendum #1** of MAQP #2622-01. **MAQP #2622-01** replaced MAQP #2622-00.

On August 2, 2000, Schellinger requested a renewal of the addendum in MAQP #2622-01 to allow the facility to continue operation at seven different locations in or within 10 kilometers (km) of the Kalispell, Columbia Falls, and Whitefish PM_{10} nonattainment areas during the winter months (October 1 through March 31).

The addendum contained restrictions to protect the air quality in and within 10 km of the Kalispell, Columbia Falls, and Whitefish PM_{10} nonattainment areas. SCREEN air dispersion modeling was conducted for MAQP #2622-02 to determine a production limit that protected the nonattainment areas. One SCREEN model was run to account for the seven winter locations. However, worst-case modeling results were used to determine a

production limit that protected existing air quality. For additional operational flexibility, the Department added language that allowed operation at any location in or within 10 km of certain PM_{10} nonattainment areas during the summer months. The permit was also updated to reflect the current format used for writing permits. **MAQP #2622-02** replaced MAQP #2622-01 and **Addendum #2** replaced Addendum #1.

On April 24, 2003, Schellinger was issued **MAQP #2622-03** for the addition of a 1973 Pioneer 30" x 42" primary plant jaw crusher plant (maximum capacity 400 TPH), including a grizzly feeder screen, and associated equipment. The 1973 Pioneer plant replaced a similar 1976 Pioneer jaw crusher plant that was removed. A 1980 Caterpillar 520-kilowatt (kW) diesel generator was also added. Schellinger's Addendum 2 to MAQP #2622-02 expired, so MAQP #2622-03 contained a new **Addendum #3**.

Addendum #3 also contained restrictions to protect the air quality in and within 10 km of the Kalispell, Columbia Falls, and Whitefish PM_{10} nonattainment areas. SCREEN VIEW air dispersion modeling was conducted for MAQP #2622-03 to determine a production limit that would protect the nonattainment areas. Worst-case modeling results were used to determine a production limit that would protect existing air quality. MAQP #2622-03 and Addendum #3 were updated to reflect current permit language and rule references used by the Department. MAQP #2622-03 replaced MAQP #2622-02 and Addendum #3 replaced Addendum #2.

On February 2, 2004, the Department received a written request from Schellinger to add three additional sites to the list in the addendum of potential winter locations that Schellinger may use. The Department updated the addendum to reflect the request. In addition, the Department added language to the addendum that would allow Schellinger to propose additional winter sites without needing an administrative amendment to operate at the sites. Furthermore, the Department updated the rule citations within the permit and permit analysis to reflect the current air quality rules. **MAQP #2622-04** replaced MAQP #2622-03 and **Addendum #4** replaced Addendum #3.

On November 30, 2006, the Department received a written request from Schellinger to update the spray bar language in Addendum #4, to update the emissions inventory in the permit and the addendum, and to add an additional site to the list in the addendum of potential winter locations that Schellinger may use. The Department updated the addendum to reflect the request. **MAQP #2622-05** replaced MAQP #2622-04 and **Addendum #5** replaced Addendum #4.

On January 25, 2007, the Department issued final MAQP #2622-05 to Schellinger. Upon review of the final permit, the Department found some administrative errors within the permit. Section II.A.8 and Section II.A.10 contain crusher capacities of 400 tons per year (TPY). These should read 400 TPH. The Department made these changes, as appropriate. **MAQP #2622-06** replaced MAQP #2622-05.

D. Current Permit Action

On June 10, 2009, the Department received a permit modification application from Schellinger. The application requested authorization for construction and operation of a 755 horsepower (hp) diesel-fired engine/generator and proposed hours of operation limitations upon the generator to achieve synthetic minor status relative to the Title V Major Source threshold for oxides of nitrogen (NO_x). Schellinger proposed a decrease in hourly crushing production capacity limitations; however, based on the design capacity of the crusher and to maintain enforceablility of the Department did not alter the applicable hourly crushing capacity limitation permit condition(s). Schellinger also proposed increase

in hourly screening production capacity limitations to match the design capacity of the screen for the same reasons as listed for the crusher the Department did execute a change to the appropriate screening hourly production capacity limitations. Schellinger proposed removal of the 520 kilowatt (kW) diesel-fired generator from the MAQP and requested revised limitations to operate the proposed engine/generator and other permitted equipment at currently authorized locations that are in or within 10 km of a nonattainment area. Finally, this MAQP modification updates the permit format, language, and rule references to conform to the Department's current permit format, language, and rule references; and, incorporates new and recently modified Federal New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, as applicable. **MAQP #2622-07** and **Addendum #6** replace MAQP #2622-06 and Addendum #5, respectively

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   Schellinger 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}

Schellinger 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, Schellinger 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).

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/screening plant to be subject to 40 CFR 60, Subpart OOO requirements, two specific criteria must be met. First the crushing/screening plant must meet the definition of an affected facility and second, the equipment in question must have been constructed or modified after August 31, 1983. Based on the information submitted by Schellinger, the crushing/screening equipment to be used with MAQP #2622-07 is not subject to NSPS requirements because of the date of manufacture of the crushing/screening equipment (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants). However, this Subpart may become applicable if a crusher is added to the facility (under the de minimis friendly permit conditions) that meets the definition of an affected facility and was manufactured after August 31, 1983.

c. 40 CFR 60, Subpart IIII – Standards of Performance for Compression Ignition Internal Combustion Engines. NSPS-affected engines at the Schellinger facility include any new or reconstructed stationary compression ignition (CI) internal combustion engines (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, and stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005 (40 CFR 60, Subpart IIII). The currently proposed engine is not subject to 40 CFR 60, Subpart IIII because it was manufactured or reconstructed before April 1, 2006, or July 11, 2005. However, this Subpart will be applicable to any CI ICE currently in use or added at a future date that is manufactured after April 1, 2005.

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. Schellinger 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. Schellinger has a PTE greater than 15 tons per year of PM_{10}, NO_x, carbon monoxide (CO) and oxides of sulfur (SO_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. Schellinger 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. Schellinger submitted an affidavit of publication of public notice for the June 5, 2009, issue of the *Daily Inter Lake*, a newspaper of general circulation in the Town of Kalispell, in Flathead 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 Schellinger 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 #2622-07 for Schelinger, 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 not subject to current NSPS.

e. This facility is not subject to any current NESHAP standards.

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.

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

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.

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

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

III. BACT Determination

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

The diesel engine/generator proposed to power the production equipment was previously permitted based on kW instead of hp; however, an applicable BACT analysis was conducted and determined that additional control would be cost prohibitive.

The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

IV. Emission Inventory

	Tons/Year					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Crushers (up to 400 TPH)	1.58	0.95				
Screens (up to 700 TPH)	6.75	2.27				
Truck Unloading (4)	0.70	0.70				
Material Transfer (10 Material Transfers, 400 TPH)	2.45	0.81				
Pile Forming (2 Pile Forming, 400 TPH)	11.21	5.26				
Engine/Generator (up to 755 hp)	7.06	7.06	99.47	7.93	21.43	25.96
Haul Roads	12.68	3.60				
Total	42.43	20.64	99.47	7.93	21.43	25.96

Calculations

Crushers - SCC 3-05-030-03, controlled						
Crushers (up to 400 TPH)						
Maximum Process Rate:	400	ton/hr				
Hours of operation:	24.00	hr/day	or	8760	hr/yr	
PM Emissions:						
Emission Factor:	0.0012	lb/ton	(AP-42, Section 11.19.2-2, 8/04)			
Hourly Calculations:	0.0012 lb/ton * 400 ton/hr =			**0.36**	lb/hr	
Daily Calculations:	0.36 lb/hr * 24 hr/day =			**11.52**	lb/day	
Annual Calculations:	0.36 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**2.10**	ton/yr	
PM_{10} Emissions:						
Emission Factor:	0.00054	lb/ton	(AP-42, Section 11.19.2-2, 8/04)			
Hourly Calculations:	0.00054 lb/ton * 400 ton/hr =			**0.22**	lb/hr	
Daily Calculations:	0.162 lb/hr * 24 hr/day=			**5.18**	lb/day	
Annual Calculations:	0.162 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**0.95**	ton/yr	

Screens - SCC 3-05-020-02,-03, controlled						
Screens (up to 700 TPH)						
Maximum Process Rate:	700	ton/hr				
Adjusted Process Rate:	700	ton/hr				
Hours of operation:	24.00	hr/day	or	8760	hr/yr	
PM Emissions:						
Emission Factor:	0.0022	lb/ton	(AP-42, Section 11.19.2-2, 8/04)			
Hourly Calculations:	0.0022 lb/ton * 700 ton/hr =			**1.54**	lb/hr	
Daily Calculations:	1.54 lb/hr * 24 hr/day =			**36.96**	lb/day	
Annual Calculations:	1.54 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**6.75**	ton/yr	

PM_{10} Emissions:						
Emission Factor:	0.00074	lb/ton	(AP-42, Section 11.19.2-2, 8/04)			
Hourly Calculations:	0.00074 lb/ton * 700 ton/hr =			**0.52**	lb/hr	
Daily Calculations:	0.518 lb/hr * 24 hr/day=			**12.43**	lb/day	
Annual Calculations:	0.518 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**2.27**	ton/yr	

Material Transfer - SCC 3-05-020-06, controlled					
Truck Unloading (4)					
Maximum Process Rate:	400	ton/hr			
Adjusted Process Rate:	400	ton/hr			
Number of Material Transfer	4	Load			
Hours of operation:	8760	hr/yr	or 24.00	hr/day	
PM Emissions:					
Emission Factor:	0.0001	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.0001 lb/ton * 400 ton/hr * 4 Load=			**0.16**	lb/hr
Daily Calculations:	0.16 lb/hr * 24 hr/day=			**3.84**	lb/day
Annual Calculations:	0.16 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**0.70**	ton/yr
PM_{10} Emissions:					
Emission Factor:	0.0001	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.0001 lb/ton * 400 ton/hr * 4 Load =			**0.16**	lb/hr
Daily Calculations:	0.16 lb/hr * 24 hr/day=			**3.84**	lb/day
Annual Calculations:	0.16 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**0.70**	ton/yr

Material Transfer (10 Material Transfers, 400 TPH)					
Maximum Process Rate:	400	ton/hr			
Adjusted Process Rate:	400	ton/hr			
Number of Material Transfer	10				
Hours of operation:	8760	hr/yr	or 24.00	hr/day	
PM Emissions:					
Emission Factor:	0.00014	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.00014 lb/ton * 400 ton/hr * 10 Transfers=			**0.56**	lb/hr
Daily Calculations:	0.56 lb/hr * 24 hr/day=			**13.44**	lb/day
Annual Calculations:	0.56 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**2.45**	ton/yr
PM_{10} Emissions:					
Emission Factor:	0.000046	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.000046 lb/ton * 400 ton/hr * 10 Transfers =			**0.18**	lb/hr
Daily Calculations:	0.184 lb/hr * 24 hr/day=			**4.42**	lb/day
Annual Calculations:	0.184 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**0.81**	ton/yr

Pile Forming (2 Pile Forming, 400 TPH)					
Maximum Process Rate:	400	ton/hr			
Adjusted Process Rate:	400	ton/hr			
Number of Piles	2	Piles			
Hours of operation:	8760	hr/yr	or 24.00	hr/day	
PM Emissions:					
Emission Factor:	0.0032	lb/ton	(AP-42, Section 13.2.4, 1/95)		
Hourly Calculations:	0.0032 lb/ton * 400 ton/hr * 2 Piles=			**2.56**	lb/hr
Daily Calculations:	2.56 lb/hr * 24 hr/day=			**61.44**	lb/day
Annual Calculations:	2.56 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**11.21**	ton/yr
PM_{10} Emissions:					
Emission Factor:	0.0015	lb/ton	(AP-42, Section 13.2.4, 1/95)		
Hourly Calculations:	0.0015 lb/ton * 400 ton/hr * 2 Piles =			**1.20**	lb/hr
Daily Calculations:	1.2 lb/hr * 24 hr/day=			**28.80**	lb/day
Annual Calculations:	1.2 lb/hr * 8760 hr/yr * 0.0005 ton/lb =			**5.26**	ton/yr

Engine/Generator (up to 755 hp)

Generator Size = 755 hp
Hours of Operation: 8500 hr/yr or ≈23.25 hr/day

PM Emissions:

Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
Hourly Calculations	755 hp * 0.0022 lb/hp-hr =	**1.66**	lb/hr
Daily Calculations	755 hp * 0.0022 lb/hp-hr * 23.25 hr/day =	**38.62**	lb/day
Annual Calculations	755 hp * 0.0022 lb/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**7.06**	ton/yr

PM_{10} Emissions:

Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
Hourly Calculations	755 hp * 0.0022 lb/hp-hr =	**1.66**	lb/hr
Daily Calculations	755 hp * 0.0022 lb/hp-hr * 23.25 hr/day =	**38.62**	lb/day
Annual Calculations	755 hp * 0.0022 lb/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**7.06**	ton/yr

NO_x Emissions:

Emission Factor	0.031 lb/hp-hr	(AP-42 Table 3.3-1, 10/96)	
Hourly Calculations	755 hp * 0.031 lb/hp-hr =	**23.41**	lb/hr
Daily Calculations	755 hp * 0.031 lb/hp-hr * 23.25 hr/day =	**544.2**	lb/day
Annual Calculations	755 hp * 0.031 lb/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**99.47**	ton/yr

VOC Emissions:

Emission Factor	0.00247 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
Hourly Calculations	755 hp * 0.00247 lb/hp-hr =	**1.86**	lb/hr
Daily Calculations	755 hp * 0.00247 lb/hp-hr * 23.25 hr/day =	**43.36**	lb/day
Annual Calculations	755 hp * 0.00247 lb/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**7.93**	ton/yr

CO Emissions:

Emission Factor	0.00668 lb/hp-hr	(AP-42 Table 3.3-1, 10/96)	
Hourly Calculations	755 hp * 0.00668 lb/hp-hr =	**5.04**	lb/hr
Daily Calculations	755 hp * 0.00668 lb/hp-hr * 23.25 hr/day =	**117.3**	lb/day
Annual Calculations	755 hp * 0.00668 lb/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**21.43**	ton/yr

SO_x Emissions:

Emission Factor 0.00809 lbs/hp-hr (AP-42 Table 3.4-1,10/96)
% Sulfur in Fuel = 0.4 (AP-42, Fifth Edition, Volume 1, Appendix A: Diesel Fuel Specs))
0.00809 lbs/hp-hr

Hourly Calculations	755 hp * 0.00809 lbs/hp-hr =	**6.11**	lb/hr
Daily Calculations	755 hp * 0.00809 lbs/hp-hr * 23.25 hr/day =	**142.0**	lb/day
Annual Calculations	755 hp * 0.00809 lbs/hp-hr * 8500 hr/yr * 0.0005 ton/lb =	**25.96**	ton/yr

Haul Roads

Vehicle miles travelled: 5 VMT/day {Estimated}
Control Efficiency is included in Emission Factor

PM Emissions:
PM Emission Factor (Rated Load Capacity <50 tons): 13.90 Lbs/VMT (AP-42, Section 13.2.2, 12/03)

E(PM)= (5 VMT/day)(13.90 Lbs/VMT)
E(PM)= **69.50** Lbs/day
12.68 tons/yr

PM_{10} Emissions:
PM_{10} Emission Factor (Rated Load Capacity <50 tons): 3.95 Lbs/VMT (AP-42, Section 13.2.2, 12/03)

$E(PM_{10})$= (5 VMT/day)(3.95 Lbs/VMT)
$E(PM_{10})$= **19.75** Lbs/day
3.60 tons/yr

V. Existing Air Quality

MAQP #2622-07 allows the operation of the Schellinger equipment at various locations throughout Montana. The areas covered by MAQP #2622-07 are designated as attainment/unclassified for the ambient air quality standards. Addendum #6 to MAQP #2622-07 will allow Schellinger to operate in certain PM_{10} nonattainment areas during both the summer and winter months.

VI. Air Quality Impacts

MAQP #2622-07 is issued for the operation of a portable crushing and screening plant to be initially located in the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County. MAQP #2622-07 will also cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. Addendum #6 to MAQP #2622-07, including more stringent requirements to protect the non-attainment area has been developed and is included for when the facility operates at locations 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*.

SCREEN VIEW air dispersion modeling was conducted for MAQP #2622-07 to determine the potential for ambient air quality impacts. Worst-case modeling results were compared to relevant air quality standards to determine if additional analysis or limitations were necessary. Based on the modeling results Addendum 6 also contains more restrictive production restrictions to protect the air quality when this facility operates in and within 10 km of the Kalispell, Columbia Falls, and Whitefish PM_{10} nonattainment areas.

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?
	NA	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.

Addendum #6
Schellinger Construction Company, Inc.
Montana Air Quality Permit (MAQP) #2622-07

An addendum to MAQP #2622-07 is issued to Schellinger Construction Company, Inc. (Schellinger), pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

The Schellinger facility consists of a crusher (maximum capacity 400 tons per hour (TPH)), a screen (up to 700 TPH), a diesel engine/generator (up to 755 horsepower (hp)), and associated equipment. Schellinger operates the portable crushing facility in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas including but not limited to: Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte.

II. Seasonal and Site Restrictions

Addendum #6 applies to the Schellinger facility while operating at any location in or within 10 km of certain 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 locations in or within 10 km of a PM_{10} nonattainment area where Schellinger may operate are:

1. NE¼ of the SW¼ of Section 23, Township 30 North, Range 21 West (A-1 Paving Hodgson Road Pit)
2. NE¼ of the NE¼ of Section 26, Township 29 North, Range 22 West (Tutvedt Pit)
3. NW¼ of the NW¼ of Section 31, Township 29 North, Range 21 West (NUPAC Pit)
4. NW¼ of the NW¼ of Section 22, Township 29 North, Range 21 West (A-1 Paving Pit)
5. N½ of Section 21, Township 30 North, Range 21 West (Carlson Pit)
6. S½ of the SE¼ of Section 31, Township 31 North, Range 22 West (Peschel Pit)
7. NE¼ and SE¼ of the NW ¼ of Section 9, Township 27 North, Range 21 West (Spoklie Pit)
8. NW¼ of the SE¼ of Section 36, Township 30 North, Range 21 West (County Pit)
9. NW¼ of the SE¼ of Section 36, Township 30 North, Range 21 West (Jellison Pit)
10. SE¼ of the NW¼ of Section 11, Township 30 North, Range 20 West (Columbia Heights Pit)
11. Section 17, Township 29, Range 22 West (Beasley Pit)
12. NW¼ of Section 16, Township 29 North, Range 22 West (Tutvedt Pit 2)
13. 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) – Schellinger may operate at any location in or within 10 km of the Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte PM_{10} nonattainment areas.

C. Schellinger shall comply with the limitations and conditions contained in Addendum #6 to MAQP #2622-07 while operating in or within 10 km of any of the previously listed PM_{10} nonattainment areas. Addendum #6 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #6 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. Conditions and Limitations

A. Operational Conditions and Limitations (winter nonattainment)

During the winter season (October 1-March 31) operation in or within a PM_{10} nonattainment area Schellinger shall comply with the following conditions and limitations.

1. Total crushing production of all crushers shall not exceed 5,700 tons during any rolling 24-hour time period (ARM 17.8.749).

2. Total screening production of all screens shall be limited to 13,300 tons during any rolling 24-hour time period (ARM 17.8.749).

3. The engine/generator used with this facility shall not have a design capacity greater than 755 hp (ARM 17.8.749).

4. Total generator operation time shall not exceed 11.5 hours during any rolling 24-hour time period (ARM17.8.749).

B. Operational Conditions and Limitations (summer nonattainment)

During the summer season (April 1- September 30) operation in or within a PM_{10} nonattainment area Schellinger shall comply with the following conditions and limitations.

1. Total crushing production of all crushers shall not exceed 400 TPH or 7,400 tons during any rolling 24-hour time period (ARM 17.8.749).

2. Total screening production of all screens shall be limited to 700 TPH and 16,800 tons during any rolling 24-hour time period (ARM 17.8.749).

3. The engine/generator used with this facility shall not have a design capacity greater than 755 hp (ARM 17.8.749).

4. Total generator operation time shall not exceed 23.25 hours during any rolling 24-hour time period (ARM17.8.749).

C. Operational Conditions and Limitations (all times nonattainment)

During both winter and summer operation in or within a PM_{10} nonattainment area Schellinger shall comply with the following conditions and limitations.

1. Water spray bars shall be available, on site at all times, and operated, as necessary, on the crushers, screens, and all material transfer points to maintain compliance with the opacity limitations in Sections III.C.2, and III.C.3 (ARM 17.8.749).

2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

3. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

4. Schellinger 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).

5. Schellinger shall treat all unpaved portions of the haul roads, 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).

D. 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 five years and submitted to the Department upon request. The information must include (ARM 17.8.749):

   a. Tons of material crushed by each crusher at each site (including amount of recirculated/rerun material),

   b. Tons of material screened by each screen at each site (including amount of recirculated/rerun material),

   c. Tons of bulk material loaded at each site (production),

   d. Daily hours of operation at each site,

   e. Gallons of diesel used by each engine/generator at each site,

   f. Hours of operation and sizes for each engine/generator at each site, and

   g. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles.

3. Schellinger shall document, by day, the total crushing production. Schellinger shall sum the total crushing production for the previous day to verify compliance with the limitation in Sections III.A.1 and III.B.1. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emission inventory (ARM 17.8.749).

4. Schellinger shall document, by day, the total screening production. Schellinger shall sum the total screening production for the previous day to verify compliance with the limitation in Sections III.A.2 and III.B.2. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emission inventory (ARM 17.8.749).

Addendum #6 Analysis
Schellinger Construction Company, Inc.
Montana Air Quality Permit (MAQP) #2622-07

I. Permitted Equipment:

Schellinger Construction Company, Inc. (Schellinger), owns and operates a portable crushing/screening facility consisting of a portable jaw crusher (maximum capacity of 400 tons per hour (TPH)), a grizzly screen (maximum capacity 700 TPH), a diesel engine/generator (up to 755 horsepower (hp)), and associated equipment.

II. Source Description

For a typical operational setup, unprocessed materials are loaded onto the feeder grizzly screen and conveyed to a jaw crusher. From the jaw crusher, the materials are conveyed to a stockpile. The crushed and sized materials are stockpiled and used for construction operations.

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 source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Schellinger demonstrated compliance with all applicable rules and standards as required for permit issuance.

B. ARM 17.8.764 Modification of Permit: An air quality permit may be modified 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 which do not result in an increase in emissions because of the 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 air quality permit 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.

Schellinger must submit proof of compliance with the transfer and public notice requirements when Schellinger transfers to any of the locations covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and limitations in Addendum #6 to Permit #2622-07 will prevent Schellinger from having a significant impact on certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas.

IV. Emission Inventory

Winter-Time Nonattaiment Inventory	Lbs/Day					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Crushers (up to 400 TPH)	8.88	4.00				
Screens (up to 700 TPH)	28.49	9.58				
Truck Unloading (4)	2.96	2.96				
Material Transfer (10 Material Transfers, 400 TPH)	10.36	3.40				
Pile Forming (2 Pile Forming, 400 TPH)	47.36	22.20				
Engine/Generator (up to 755 hp)	19.10	19.10	269.16	21.45	58.00	70.24
Haul Roads	19.75	19.75				
Total	136.90	80.99	269.16	21.45	58.00	70.24

Winter- Time Nonattainment Calculations

Crushers - SCC 3-05-030-03, controlled
Crushers (up to 400 TPH)

Maximum Process Rate::	400	ton/hr			
Hours of operation:	18.50	hr/day			
PM Emissions:					
Emission Factor:	0.0012	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:		0.0012 lb/ton * 400 ton/hr =		0.48	lb/hr
Daily Calculations:		0.36 lb/hr * 18.5 hr/day =		8.88	lb/day
PM-10 Emissions:					
Emission Factor:	0.00054	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:		0.00054 lb/ton * 400 ton/hr =		0.22	lb/hr
Daily Calculations:		0.162 lb/hr * 18.5 hr/day=		4.00	lb/day

Screens - SCC 3-05-020-02,-03, controlled
Screens (up to 700 TPH)

Maximum Process Rate:	700	ton/hr			
Hours of operation:	18.5	hr/day			
PM Emissions:					
Emission Factor:	0.0022	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:		0.0022 lb/ton * 700 ton/hr =		1.54	lb/hr
Daily Calculations:		1.54 lb/hr * 18.5 hr/day =		28.49	lb/day
PM-10 Emissions:					
Emission Factor:	0.00074	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:		0.00074 lb/ton * 700 ton/hr =		0.52	lb/hr
Daily Calculations:		0.518 lb/hr * 18.5 hr/day=		9.58	lb/day

Material Transfer - SCC 3-05-020-06, controlled
Truck Unloading (4)

Maximum Process Rate:	400	ton/hr			
Number of Material Transfer	4	Load			
Hours of operation:	18.5	hr/day			
PM Emissions:					
Emission Factor:	0.0001	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:		0.0001 lb/ton * 400 ton/hr * 4 Load=		0.16	lb/hr
Daily Calculations:		0.16 lb/hr * 18.5 hr/day=		2.96	lb/day

PM_{10} Emissions:					
Emission Factor:	0.0001	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.0001 lb/ton * 400 ton/hr * 4 Load =			0.16	lb/hr
Daily Calculations:	0.16 lb/hr * 18.5 hr/day=			2.96	lb/day

Material Transfer (10 Material Transfers, 400 TPH)					
Maximum Process Rate:	400	ton/hr			
Number of Material Transfer	10	Transfers			
Hours of operation:	18.5	hr/day			
PM Emissions:					
Emission Factor:	0.00014	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.00014 lb/ton * 400 ton/hr * 10 Transfers=			0.56	lb/hr
Daily Calculations:	0.56 lb/hr * 18.5 hr/day=			10.36	lb/day
PM_{10} Emissions:					
Emission Factor:	0.000046	lb/ton	(AP-42, Section 11.19.2-2, 8/04)		
Hourly Calculations:	0.000046 lb/ton * 400 ton/hr * 10 Transfers =			0.18	lb/hr
Daily Calculations:	0.184 lb/hr * 18.5 hr/day=			3.40	lb/day

Pile Forming (2 Pile Forming, 400 TPH)					
Maximum Process Rate:	400	ton/hr			
Number of Piles	2	Piles			
Hours of operation:	18.5	hr/day			
PM Emissions:					
Emission Factor:	0.0032	lb/ton	(AP-42, Section 13.2.4, 1/95)		
Hourly Calculations:	0.0032 lb/ton * 400 ton/hr * 2 Piles=			2.56	lb/hr
Daily Calculations:	2.56 lb/hr * 18.5 hr/day=			47.36	lb/day
PM_{10} Emissions:					
Emission Factor:	0.0015	lb/ton	(AP-42, Section 13.2.4, 1/95)		
Hourly Calculations:	0.0015 lb/ton * 400 ton/hr * 2 Piles =			1.20	lb/hr
Daily Calculations:	1.2 lb/hr * 18.5 hr/day=			22.20	lb/day

Engine/Generator (up to 755 hp)					
Generator Size =	755	hp			
Hours of Operation:	11.5	hr/day			
PM Emissions:					
Emission Factor	0.0022	lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	755 hp * 0.0022 lb/hp-hr =			1.66	lb/hr
Daily Calculations	755 hp * 0.0022 lb/hp-hr * 11.5 hr/day =			19.10	lb/day
PM_{10} Emissions:					
Emission Factor	0.0022	lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	755 hp * 0.0022 lb/hp-hr =			1.66	lb/hr
Daily Calculations	755 hp * 0.0022 lb/hp-hr * 11.5 hr/day =			19.10	lb/day
NO_x Emissions:					
Emission Factor	0.031	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)		
Hourly Calculations	755 hp * 0.031 lb/hp-hr =			24.41	lb/hr
Daily Calculations	755 hp * 0.031 lb/hp-hr * 11.5 hr/day =			269.2	lb/day

VOC Emissions:

Emission Factor	0.00247	lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations			755 hp * 0.00247 lb/hp-hr =	1.86	lb/hr
Daily Calculations			755 hp * 0.00247 lb/hp-hr * 11.5 hr/day =	21.45	lb/day

CO Emissions:

Emission Factor	0.00668	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)		
Hourly Calculations			755 hp * 0.00668 lb/hp-hr =	5.04	lb/hr
Daily Calculations			755 hp * 0.00668 lb/hp-hr * 11.5 hr/day =	58.00	lb/day

SO_x Emissions:

Emission Factor 0.00809 lbs/hp-hr (AP-42 Table 3.4-1,10/96)

% Sulfur in Fuel = 0.4 (AP-42, Fifth Edition, Volume 1, Appendix A: Diesel Fuel Specs))

0.00809 lbs/hp-hr

Hourly Calculations	755 hp * 0.00809 lbs/hp-hr =	6.12	lb/hr
Daily Calculations	755 hp * 0.00809 lbs/hp-hr * 11.5 hr/day =	70.24	lb/day

Haul Roads

Vehicle miles travelled: 5 VMT/day {Estimated}

Control Efficiency is included in Emission Factor

PM Emissions:

PM Emission Factor (Rated Load Capacity <50 tons): 13.90 Lbs/VMT (AP-42, Section 13.2.2, 12/03)

E(PM)= (5 VMT/day)(13.90 Lbs/VMT)

E(PM)= 69.50 Lbs/day

PM_{10} Emissions:

PM_{10} Emission Factor (Rated Load Capacity <50 tons): 3.95 Lbs/VMT (AP-42, Section 13.2.2, 12/03)

$E(PM_{10})$= (5 VMT/day)(3.95 Lbs/VMT)

$E(PM_{10})$= 19.75 Lbs/day

Summer-Time Nonattainment Inventory	Lbs/Day					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Crushers (up to 400 TPH)	11.52	5.18				
Screens (up to 700 TPH)	36.96	12.43				
Truck Unloading (4)	3.84	3.84				
Material Transfer (10 Material Transfers, 400 TPH)	13.44	3.40				
Pile Forming (2 Pile Forming, 400 TPH)	61.44	28.80				
Engine/Generator (up to 755 hp)	38.62	38.62	544.2	43.36	117.3	142.0
Haul Roads	19.75	19.75				
Total	185.6	112.0	544.2	43.36	117.3	142.0

Summer-Time Nonattainment Calculations – See Permit

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS). 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, 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 determined these sources to be the major contributors to PM_{10} emissions.

Addendum #6 to MAQP #2622-07 is for a portable crushing/screening plant to be located at sites in or within 10 kilometers (km) of certain PM_{10} nonattainment areas during the summer season (April 1 through September 30). Summer season operations may include locations in or within 10 km of certain PM_{10} nonattainment areas, including, but not limited to Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte. Winter season (October 1 through March 31) operations may include only the locations listed in Section II.A of Addendum #6.

VI. Air Quality Impacts

Schellinger operates a portable crushing/screening plant to be located at various locations throughout Montana. Schellinger is subject to MAQP #2622-07 and Addendum #6 will while operating at any location within Montana, excluding those counties that have a Department approved County permitting program and those areas considered tribal lands.

SCREEN VIEW air dispersion modeling was conducted for MAQP #2622-07 and Addendum #6 to determine the potential for ambient air quality impacts during winter operations in or within 10 km of a nonattainment area. Worst-case modeling results were compared to relevant air quality standards to determine if additional analysis or limitations were necessary. Based on the modeling results Addendum 6 contains an 11.5 hr/rolling 24-hour operation restriction on the 755 hp generator to protect the air quality when this facility operates in and within 10 km of the Kalispell, Columbia Falls, and Whitefish PM_{10} nonattainment areas.

Based on the information provided and the limits established based on modeling results, the Department believes the amount of controlled emissions generated by this facility will not cause or contribute to an exceedence of any ambient air quality standard. Therefore, any air quality impacts will be minimal.

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

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Schellinger Construction Company, Inc.

Montana Air Quality Permit number: 2622-07

Preliminary Determination Issued: July 20, 2009
Department Decision Issued: August 24, 2009
Permit Final: September 9, 2009

1. *Legal Description of Site*: North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana.

2. *Description of Project*: Schellinger owns and operates a portable nonmetallic mineral processing crushing and screening operation to crush and sort sand and gravel. For a typical operational setup, unprocessed materials are loaded onto the feeder grizzly screen and conveyed to a jaw crusher. From the jaw crusher, the materials are conveyed to a stockpile. The crushed and sized materials are stockpiled and used for construction operations.

3. *Objectives of Project*: The objective of the proposed action is to modify Schellingers existing MAQP to allow greater operational flexibility. Proposed modifications to the permit include authorization for construction and operation of a 755 hp diesel-fired generator, a decrease in crushing production limitations, an increase in screening production limitations, and removal of the 520 kW diesel-fired generator from the MAQP, such that the facility may be operated throughout the state of Montana including in or within 10 km of a nonattainment area.

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 Schellinger 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 #2622-07 and Addendum 6 to the permit.

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

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

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

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

A. Terrestrial and Aquatic Life and Habitats

B. Water Quality, Quantity and Distribution

The proposed action would not directly impact water quantity or distribution, or terrestrial or aquatic life or habitats from the proposed project. Schellinger is currently authorized to operate the facility throughout Montana at locations that would generally consist of existing disturbed land and/or gravel pits. The proposed permit modifications would not result in new construction or ground disturbance and no new discharge or water use would be required due to the proposed permit modifications.

Changes in emissions from the proposed project may have a minor impact on water quality in the proposed project area. As stated in Section 7.F of this EA, changes in emissions and resulting impacts from those changes are expected to be minor due to minor increases in pollutant emissions that may result in local deposition. Therefore, overall impacts to the water quality, quantity and distribution, and terrestrial and aquatic life and habitats near the project area would be minor.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would not impact the geology, soil quality, stability, and moisture of the proposed project area. The proposed project would be within an existing facility and no new construction or ground disturbance to the area would be required.

As stated in Section 7.F of this EA, changes in emissions and resulting impacts from those changes are expected to be minor due the minor increase of pollutant emissions that may result in local deposition. However, deposition resulting from the proposed action is not expected to impact the geology, or the quality, stability or moister content of local soil. Overall, no impacts to the geology and soil quality, stability, and moisture of the project area would be expected.

D. Vegetation Cover, Quantity, and Quality

The proposed action would not directly impact vegetative cover, quantity or quality, because it would not result in new construction or ground disturbance.

As stated in Section 7.F of this EA, minor increase of pollutant emissions may result in local deposition affecting vegetative cover and quality; however, the proposed increase in emissions is relatively minor and not expected to result in significant deposition. Therefore, overall impacts to vegetative cover, quantity and quality near the project area would be minor.

E. Aesthetics

The proposed action would include a modification of a facility that is expected to operate at existing industrial locations. However, no significant change to the visual profile or character of permitted equipment would occur. Therefore, the proposed action would not result in net change in the aesthetics of the areas this plant would operate. The permitted equipment may move to gravel pit locations that have temporarily not been in operation and would change the visual profile and character of those locations upon recommencement of operations at those locations. However, these locations would already be industrial in nature; therefore, impacts would be minor.

F. Air Quality

Particulate, NO_x, VOC, CO and SO_x emissions would increase as a result of the proposed action. Net increases in PM_{10}, NO_x, VOC, CO and SO_x emission would be 7.83, 5.88, 4.83, 5.76, 4.64 and 1.26 ton/year, respectively. The minor increases in particulate emissions NO_x, VOC, CO and SO_x emission may result in additional near or far field deposition, additional formation of ozone locally, or formation of secondary particulate matter. Nonetheless, Department believes that increase in emissions would result in minor changes to air quality and impacts from increases in local deposition of pollutants would be immeasurable due to dispersion characteristics of pollutants in the atmosphere.

The Department determined that controlled emissions from the proposed action would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the proposed project would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to screen for unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search identified 10 known occurrences and/or the range of species of special concern located within and near project area. In this case, the project area was defined by the section, township, and range of the proposed location with an additional one mile buffer zone. Identified species of concern included Bull Trout (*Salvelinus confluentus*), Gray Wolf (*Canis lupus*), Last Best Place Damselfly (*Enallagma optimolocus*), Aloina moss (*Aloina brevirostris*), Amblyodon moss (*Amblyodon dealbatus*), Short-styled Thistle (*Cirsium brevistylum*), Latah Tule Pea (*Lathyrus bijugatus*), Deer Indian Paintbrush (*Castilleja cervina*), Small Yellow Lady's-slipper (*Cypripedium parviflorum*), and Madenhair Spleenwort (*Asplenium trichomanes*).

The proposed action would be located at an existing facility, would not require additional ground disturbance or significant construction, and would not be likely to result in measurable changes to local ecosystems. Therefore, the Department has determined that the proposed action would not impact species of special concern or fragile or limited environmental resources.

Similarly, no additional ground disturbance, construction or significant changes to methods of operation of the permitted facilities would occur from the permit modification when the gravel plant moves to other locations throughout the state, which would likely already be existing industrial facilities. Therefore, no impacts to species of concern or, fragile or limited environmental resources at those locations would occur.

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

The proposed action could result in a net decrease in operational consumption of diesel fuel as hours of operation limitations on that emitting unit have been decreased. Conversely, the permit modification may result in an aggregate increase in actual pollutant emissions because overall allowable emissions for criteria pollutants have increased. However, increases in air pollutant emissions would not cause or contribute to an exceedence of applicable air quality standards. No increases in demand for water resources are expected in response to the permit modification. Therefore, overall impacts on the demands for the environmental resources of water, air, and energy would be minor at the initial location and other permitted operational locations through the state.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society (SHPO) to screen for occurrences of historical and archaeological sites near the proposed project area. According to SHPO records, there have not been any recorded historic or archaeological sites identified within the proposed area. Therefore, SHPO recommended that a cultural resource inventory is not warranted. Since the proposed action would not require additional ground disturbance the Department has determined that there would be no potential impact to historical or archaeological sites.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor from the proposed action due to the scope and nature of the proposed facility modifications. The Department believes that the facility can be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #2622-07.

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

B. Cultural Uniqueness and Diversity

The proposed action would not be expected to cause impacts to the social structure and customs, because the proposed permit modification would include permitting the existing diesel generator based on its actual rather than estimated horsepower and a change in allowable operation capacity of production equipment would not directly impact the physical or intellectual arrangement of the community, its parts or elements, nor does it affect any known public interest in the area. Similarly the proposed action would not be expected to affect cultural uniqueness or diversity because the proposed facility modification would not require additional employees that may result in a potential influx of immigrants with different cultural attributes. Therefore, the proposed project would have no impact on the social structures and mores and cultural uniqueness and diversity in the area.

C. Local and State Tax Base and Tax Revenue

The proposed action would not result in impacts to the local and state tax base and tax revenue because no new employees would be needed as a result of the proposed permit modification and the net change in the potential amount of gravel that can be processed is negligible. Further, the proposed modification would not require significant construction activities. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

No additional ground disturbance, construction or significant changes to methods of operation of the permitted facilities that would result in a loss of land capable of supporting agricultural production would occur from the permit modification at the initial location or at other locations

the plant may move to throughout the state. The initial location of the gravel plant is already a developed industrial site and the proposed permit modification does not authorize a significant change to the plant capacity that would result in a significant increase or decrease in industrial production at the site. Similarly when the gravel plant moves to other locations throughout the state those locations are expected to be existing industrial facilities.

E. Human Health

The proposed action would not result in impacts to human health. As explained in Section 7.F of this EA, minor changes may occur in local air quality and additional deposition of pollutants may occur; however, pollutant emissions are not expected to cause or contribute to a violation of any air quality standard and the proposed facility modification has been determined to comply with all applicable air quality rules and regulations. These rules, regulations, and standards are designed to be protective of human health. Therefore no impacts to human health are expected.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed action would be a modification to permitted equipment at an industrial facility located on private land. No public access to recreational or wilderness activities would exist on this private land. Therefore, no impact to access to recreational and wilderness activities would result from the proposed permitting action.

G. Quantity and Distribution of Employment

H. Distribution of Population

The proposed action is not expected to have impacts on the quantity and distribution of employment or the distribution of population in the area because the modifications proposed at the facility would not require additional employees. Current employees in the area associated with facility would be likely to execute any required physical site changes required. No new jobs, or immigration into or emigration is expected.

I. Demands for Government Services

The project would result in minor impacts on the demands for government services because time is required by government agencies to issue MAQP #2622-07 and to assure compliance with applicable rules, standards, and conditions contained in MAQP #2622-07. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size and existing industrial nature of the facility.

J. Industrial and Commercial Activity

No impacts are expected on the local industrial and commercial activity because the proposed action would not modify the ability of this, or similar facilities to produce a product.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals in the area. The permit requires compliance with state standards and goals. The state standards would be protective of the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

The Department has not identified cumulative and secondary impacts to the economic and social aspects of the human environment in the immediate area due to the proposed permitting action or facility modifications. The proposed permit modification is not expected to change in the industrial production, employment, and tax revenue (etc.) associated with the facility.

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

The current permitting action is for permit modification for an authorized gravel crushing and screening plant. MAQP #2622-07 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: P. Skubinna
Date: July 9, 2009