



Brian Schweitzer, Governor

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: www.deq.mt.gov

September 11, 2009

Al Schellinger
Schellinger Construction Company
P.O. Box 39
Columbia Falls, MT 59912-0039

Dear Mr. Schellinger:

Montana Air Quality Permit #3257-04 is deemed final as of September 11, 2009, by the Department of Environmental Quality (Department). This permit is for a portable crushing and screening facility. 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,

A handwritten signature in cursive script that reads "Vickie Walsh".

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

A handwritten signature in cursive script that reads "Jenny O'Mara".

Jenny O'Mara
Environmental Engineer
Air Resources Management Bureau
(406) 444-1452

VW:JO
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: Schellinger Construction Company, Inc.
P.O. Box 39
Columbia Falls, MT 59912-0039

MAQP #3257-04
Application Complete: 07/13/09
Preliminary Determination Issued: 07/24/09
Department Decision Issued: 08/26/09
Permit Final: 09/11/09
AFS Number: 777-3257

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 the 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 and screening facility located in Section 16, Township 29 North, Range 22 West in Flathead County. However, MAQP #3257-04 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

MAQP #3257-04 and Addendum 5 apply to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. 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 request from Schellinger to modify MAQP #3257-03. After a conference call and several conversations with Schellinger, the design capacity of the crusher, screen and engine was modified from the original permit application in order to increase the number of hours of operation in a nonattainment area. The Department deemed the application complete on July 13, 2009.

This permit modification increases the size of the engine/generator from 520 kilowatts (kw) up to 755 horsepower (hp), production of the screen from 450 tons per hour (TPH) to 700 TPH, and crusher production from 250 TPH to 300 TPH. Schellinger also requested a federally enforceable permit limit be placed to limit the hours of operation of the 755 hp diesel engine/generator. The permit was also updated to reflect the current permit language and rule references used by the Department.

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 60, 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. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).
5. 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).
6. 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.5 (ARM 17.8.752).
7. Schellinger shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 300 TPH (ARM 17.8.749).
8. Crushing production is limited to 2,628,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. Schellinger shall not operate more than one screen at any given time and the maximum rated design capacity of the screen shall not exceed 700 TPH (ARM 17.8.749).
10. Screening production is limited to 6,132,000 tons during any rolling 12-month time period (ARM 17.8.749).
11. Schellinger may not operate more than one diesel engine/generator at any given time and the maximum rated design capacity shall not exceed 755 hp.
12. Operation of the diesel engine/generator shall not exceed 8,395 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204(3)).

13. 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).
14. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
15. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
2. All compliance source tests shall be conducted in accordance with 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(1)(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. All 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, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).
5. Schellinger shall document, by month, the crushing and screening production from the facility. By the 25th day of each month, Schellinger shall calculate the total amount of material crushed and screened during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Sections II.A.8 and II.A.10. 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 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.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.1204(3)).
7. 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 ((continuous emissions monitoring system (CEMS), continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if 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 the Board does not issue a stay, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by 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) #3257-04

I. Introduction/Process Description

Schellinger Construction Co., Inc. (Schellinger) owns and operates a portable non-metallic mineral processing plant. The facility is to be originally located at 3431 Farm to Market Road in Kalispell, MT. However, 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.*

MAQP #3257-04 and Addendum 4 apply while operating in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

A. Permitted Equipment

Schellinger owns and operates a jaw crusher (maximum capacity up to 300 tons per hour (TPH)), an attached 3-deck screen (maximum capacity up to 700 TPH), a diesel engine/generator (up to 755 horsepower (hp)), and associated equipment.

B. Source Description

For a typical operational setup, unprocessed materials are loaded into the jaw crusher then conveyed onto the 3-deck screen. From the 3-deck screen, the materials are conveyed to stockpiles. The crushed and sized materials are stockpiled and used for construction operations.

C. Permit History

On June 4, 2003, Schellinger was issued **MAQP #3257-00** and **Addendum 1** for the construction and operation of a portable crushing and screening facility. The permit and addendum allowed the facility to operate at various locations across Montana, including in or within 10 km of certain PM₁₀ nonattainment areas.

On March 17, 2004, the Department issued a permit amendment to Schellinger to add three additional operation sites to the addendum for potential winter locations. 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 add the sites. **MAQP #3257-01** replaced MAQP #3257-00 and **Addendum 2** replaced Addendum 1.

On November 30, 2006, Schellinger requested the Department: update MAQP #3257-01 to reflect the current emission factors; update the emissions inventory; include current Department language regarding spray bar requirements; and include additional pits for winter season operations. The Department updated Schellinger's permit as requested. **MAQP #3257-02** replaced MAQP #3257-01 and **Addendum 2** replaced Addendum 1.

On February 2, 2007, the Department received a request from Schellinger to modify MAQP #3257-02. Schellinger requested to increase the production limit on the screen from 250 TPH to 450 TPH. **MAQP #3257-03** replaced MAQP #3257-02 and **Addendum 3** replaced Addendum 2.

D. Current Permit Action

On June 10, 2009, the Department received a request from Schellinger to modify MAQP #3257-03. After a conference call and several conversations with Schellinger, the design capacity of the crusher, screen and engine was modified from the original permit application in order to increase the number of hours of operation in a nonattainment area. The Department deemed the application complete on July 13, 2009.

This permit modification increases the size of the engine/generator from 520 kilowatts (kw) up to 755 horsepower (hp), production of the screen from 450 tons per hour (TPH) to 700 TPH, and crusher production from 250 TPH to 300 TPH. Schellinger also requested a federally enforceable permit limit be placed to limit the hours of operation of the 755 hp diesel engine/generator. In addition, previous permit actions incorrectly numbered the Addendum and this permit action will correct the sequencing of the Addendums. The permit was also updated to reflect the current permit language and rule references used by the Department. Therefore, **MAQP #3257-04** and **Addendum 5** replace MAQP #3257-03 and Addendum 3.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

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

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
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

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 are 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 17.8.310 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.

4. ARM 17.8.340 Standard of Performance for New Stationary Sources.
 - 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 facility to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Schellinger, the crushing/screening equipment used with MAQP #3257-04 would not be subject to NSPS requirements because the crusher and attached screen were constructed prior to the NSPS trigger date.
 - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). This rule indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commences construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump engine. This Subpart would also apply to owners and operators of stationary CI ICE that has modified or reconstruct their stationary CI ICE after July 11, 2005. In order to keep the permit de minimis-friendly, this permit authorizes the use of a diesel engine with a maximum design capacity of 755 hp or less. The permit application states that the facility will be powered primarily by a diesel engine that was manufactured in 2006; therefore, this CI ICE could be subject to this Subpart.

 5. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the diesel RICE will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Therefore, any diesel RICE engine operated by Schellinger that is new or reconstructed after June 12, 2006, may be subject to the area source provisions of this Subpart.
- D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Schellinger submitted the appropriate application fee for the current permit action.

2. UARM 17.8.505 Air Quality Operation FeesU. 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. UARM 17.8.740 DefinitionsU. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. UARM 17.8.743 Montana Air Quality Permits--When RequiredU. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any asphalt plant, crusher or screen that has a potential to emit (PTE) greater than 15 tons per year of any pollutant. Schellinger has a PTE greater than 15 tons per year of particulate matter (PM), PM₁₀, oxides of nitrogen (NO_x) and carbon monoxide (CO); therefore, an air quality permit is required.
3. UARM 17.8.744 Montana Air Quality Permits--General ExclusionsU. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permit--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. This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Schellinger submitted the appropriate 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 Interlake, a newspaper of general publication in Kalispell, Montana, 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 BACT analysis description is contained 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 a Montana 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 Modifications-- 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 does not have a PTE greater than 250 tons per year of any air 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 PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3257-03 for Schellinger, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to current New Source Performance Standards (NSPS).
 - e. This facility is not subject to any current National Emission Standard for Hazardous Air Pollutants (NESHAP) standards.
 - f. This source is not a Title IV affected source.
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

Schellinger has taken federally enforceable permit limits to keep potential

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

- i. 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 a Title V 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 a Title V operating permit.

III. BACT Determination

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

A. Area Source Fugitive PM/PM₁₀ Emissions and Crushing/Screening PM/PM₁₀ Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing/screening operation. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used for dust suppression on the area surrounding the crushing/screening operation and for emissions from the crushing/screening operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. However, Schellinger may use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area where it would assist in reducing emissions of particulate matter.

Schellinger shall not cause or authorize to be discharged into the atmosphere from any crusher, screen, or associated equipment, not subject to NSPS, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Further, Schellinger shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes and shall not cause or authorize to be discharged into the atmosphere from any other associated NSPS-affected equipment, such as screens and material conveyors, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes.

Schellinger must also take reasonable precautions to limit the fugitive emissions of

airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Schellinger is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Schellinger may also use chemical dust suppression to maintain compliance with emissions limitations in Section I.A of Permit #3257-04-00. The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing and screening facility.

B. Diesel Generators

Because of the limited amount of emissions produced by this diesel engine/generator and the lack of readily available and cost effective add-on controls, add-on controls would be cost prohibitive for this facility. Therefore, the Department determined that proper operation and maintenance with no additional controls constitutes BACT for the diesel engine/generator in this case.

The control options required for this crushing and screening facility, and for the diesel generator/engine are similar to other recently permitted similar sources.

IV. Emission Inventory

Emission Source	Emissions (tons per year (TPY))					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Crusher (up to 300 TPH)	1.58	0.71				
3-deck screen (up to 700 TPH)	6.75	2.27				
Bulk loading	0.98	0.10				
Material transfer	2.15	0.71				
Pile forming (3 piles)	29.43	13.80				
Diesel engine (up to 755 hp)	6.97	6.97	98.24	7.83	21.17	6.50
Haul roads	5.07	1.44				
Total	52.93	25.99	98.24	7.83	21.17	6.50

Crusher (up to 300 TPH)

Maximum Process Rate: 300 ton/hr
 Adjusted Process Rate: 300 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 * 300 ton/hr = 0.36 lb/hr
 Daily Calculations: 0.36 lb/hr * 24 hr/day = 8.64 lb/day
 Annual Calculations: 0.36 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.58 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: 0.00054 lb/ton * 300 ton/hr = 0.16 lb/hr
 Daily Calculations: 0.16 lb/hr * 24 hr/day = 3.89 lb/day
 Annual Calculations: 0.16 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.71 ton/yr

Screen (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: $0.0022 \text{ lb/ton} * 700 \text{ ton/hr} =$ 1.54 lb/hr
 Daily Calculations: $1.54 \text{ lb/hr} * 24 \text{ hr/day} =$ 36.96 lb/day
 Annual Calculations: $1.54 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 6.75 ton/yr

PM₁₀ Emissions:

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

Bulk Loading

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Number of Material Transfer: 2 Load (per MAQP #3257-03)
 Hours of operation: 8760 hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor: 0.00016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.00016 \text{ lb/ton} * 700 \text{ ton/hr} * 2 \text{ Load} =$ 0.22 lb/hr
 Daily Calculations: $0.224 \text{ lb/hr} * 24 \text{ hr/day} =$ 5.38 lb/day
 Annual Calculations: $0.224 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.98 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.000016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.000016 \text{ lb/ton} * 700 \text{ ton/hr} * 2 \text{ Load} =$ 0.02 lb/hr
 Daily Calculations: $0.0224 \text{ lb/hr} * 24 \text{ hr/day} =$ 0.54 lb/day
 Annual Calculations: $0.0224 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.10 ton/yr

Material Transfers

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Number of Material Transfer: 5 number of Transfers (per MAQP# 3257-04)
 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: $0.00014 \text{ lb/ton} * 700 \text{ ton/hr} * 5 \text{ number of Transfers} =$ 0.49 lb/hr
 Daily Calculations: $0.49 \text{ lb/hr} * 24 \text{ hr/day} =$ 11.76 lb/day
 Annual Calculations: $0.49 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 2.15 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.000046 \text{ lb/ton} * 700 \text{ ton/hr} * 5 \text{ number of Transfers} =$ 0.16 lb/hr
 Daily Calculations: $0.161 \text{ lb/hr} * 24 \text{ hr/day} =$ 3.86 lb/day
 Annual Calculations: $0.161 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.71 ton/yr

Pile Forming (3 Piles)

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Number of Piles: 3 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:	$0.0032 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ Piles} =$		6.72 lb/hr
Daily Calculations:	$6.72 \text{ lb/hr} * 24 \text{ hr/day} =$		161.28 lb/day
Annual Calculations:	$6.72 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		29.43 ton/yr

PM₁₀ Emissions:			
Emission Factor:	0.0015 lb/ton	(AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	$0.0015 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ Piles} =$		3.15 lb/hr
Daily Calculations:	$3.15 \text{ lb/hr} * 24 \text{ hr/day} =$		75.60 lb/day
Annual Calculations:	$3.15 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		13.80 ton/yr

Engine/Generator (up to 755 hp)

Generator Size 520 KW (per Schellinger on 7/8/09)
 Engine size 755.00 hp

Hours of Operation: 8395 hr/yr or 23.00 hr/day

PM Emissions:			
Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} =$		1.66 lb/hr
Daily Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		38.20 ton/day
Annual Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		6.97 tpy

PM-10 Emissions:			
Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} =$		1.66 lb/hr
Daily Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		38.20 ton/day
Annual Calculations	$755 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		6.97 tpy

NOx Emissions:			
Emission Factor	0.031 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.031 \text{ lb/hp-hr} =$		23.41 lb/hr
Daily Calculations	$755 \text{ hp} * 0.031 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		538.32 lb/day
Annual Calculations	$755 \text{ hp} * 0.031 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		98.24 tpy

VOC Emissions:			
Emission Factor	0.00247 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.00247 \text{ lb/hp-hr} =$		1.86 lb/hr
Daily Calculations	$755 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		42.89 lb/day
Annual Calculations	$755 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		7.83 tpy

CO Emissions:			
Emission Factor	0.00668 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.00668 \text{ lb/hp-hr} =$		5.04 lb/hr
Daily Calculations	$755 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		116.00 lb/day
Annual Calculations	$755 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		21.17 tpy

SOx Emissions:			
Emission Factor	0.00205 lb/hp-hr	(AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)	
Hourly Calculations	$755 \text{ hp} * 0.00205 \text{ lb/hp-hr} =$		1.55 lb/hr
Daily Calculations	$755 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 23 \text{ hr/day} =$		35.60 lb/day
Annual Calculations	$755 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 8395 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$		6.50 tpy

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}

PM Emissions:			
PM Emission Factor (Rated Load Capacity <50 tons):	13.90 Lbs/VMT	(AP-42, Section 13.2.2, 12/03)	
PM= (5 VMT/day)(13.90 Lbs/VMT)			69.5 Lbs/day
PM (TPY) =69.5 lbs/day *365 day/yr * 0.0005 tons/lb			12.68 tons/yr

PM10 Emissions:			
PM10 Emission Factor (Rated Load Capacity <50 tons):	3.95 Lbs/VMT	(AP-42, Section 13.2.2, 12/03)	
PM10= (5 VMT/day)(3.95 Lbs/VMT)			19.75 Lbs/day
19.75 lbs/day *365 day/yr * 0.0005 tons/lb			3.60 tons/yr

V. Existing Air Quality

MAQP #3257-04 allows the operation of the Schellinger equipment at various locations throughout Montana. The areas covered by Permit #3257-04 are designated as attainment/unclassified for the ambient air quality standards. Addendum 5 to Permit #3257-04 allows Schellinger to operate in certain PM₁₀ nonattainment areas during both the summer and winter months.

VI. Air Quality Impacts

MAQP #3257-04 is issued for continued operation of a portable crushing and screening plant. The current permit action modifies the size of the diesel engine associated with this facility and increases the throughput of the screen. MAQP #3257-04 will cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of additional emissions generated by this facility be minor and will not exceed any National Ambient Air Quality Standard (NAAQS). In addition, this source is designated as portable and any air quality impacts will be minimal and temporary.

VII. Ambient Air Impact Analysis

The Department determined that based on the relatively minor amount of emissions resulting from the Schellinger operation, in addition to the limits and conditions that would be included in MAQP #3257-04, the impacts from this permitting action will be minor. The Department also believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

Addendum 5
Schellinger Construction Company, Inc.
Montana Air Quality Permit (MAQP) #3257-04

An Addendum to MAQP #3257-04 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

Schellinger owns and operates a portable non-metallic mineral processing facility. MAQP #3257-04 and Addendum 5 allows Schellinger to operate the portable crushing and screening facility in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

II. Seasonal and Site Restrictions – Winter and Summer Seasons

Addendum 5 applies to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

A. During the winter season (October 1-March 31) - The only location(s) in or within 10 km of a PM₁₀ nonattainment area where Schellinger may operate is:

1. N½ of Section 21, Township 30 North, Range 21 West (Carlson Pit);
2. NE¼ of the SW¼ of Section 23, Township 30 North, Range 21 West (A-1 Paving Hodgson Road Pit);
3. NE¼ of the NE¼ of Section 26, Township 29 North, Range 22 West (Tutvedt Pit);
4. NW¼ of the NW¼ of Section 31, Township 29 North, Range 21 West (NUPAC Pit);
5. NW¼ of the NW¼ of Section 22, Township 29 North, Range 21 West (A-1 Paving Pit);
6. S½ of the SE¼ of Section 31, Township 31 North, Range 22 West (Peschel Pit);
7. NE¼ and SE¼ of the NW¼ 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 and NE¼ of the SW¼ 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) and
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 PM₁₀ nonattainment areas.

- C. Schellinger shall comply with the limitations and conditions contained in Addendum 5 to MAQP #3257-04 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum 5 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 5 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 Seasons**

1. All visible emissions from the crushing and screening facility may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as screens and transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Water spray bars shall be available and operated, as necessary, on the crushers, screens, and all material transfer points whenever the crushing and screening facility is in operation to maintain compliance with the opacity limitations in Sections, III.A.2 and III.A.3 (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 averaged over 6 consecutive minutes (ARM 17.8.749).
5. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation in Section III.A.4 (ARM 17.8.749).
6. Operation of the crusher shall not exceed 12.75 hours per day during any rolling 24-hour time period (ARM 17.8.749).
7. Total crushing production of all crushers shall not exceed 3,825 tons during any rolling 24-hour time period (ARM 17.8.749).
8. Operation of the screen shall not exceed 12.75 hours per day during any rolling 24-hour time period (ARM 17.8.749).
9. Total screening production of all screens shall be limited to 8,925 tons during any rolling 24-hour time period (ARM 17.8.749).
10. The generator used with this facility shall not have a designated capacity greater than 755 horsepower (hp) (ARM 17.8.1204).
11. Operation of the 755 hp diesel-powered engine/generator shall not exceed 12.75 hours per day (ARM 17.8.749).
12. The diesel engine/generator must have a minimum stack height of at least 15.3 feet and a stack diameter of 0.5 feet (ARM 17.8.749)

B. Operational Conditions and Limitations – Summer Seasons

1. All visible emissions from the crushing and screening facility may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as screens and transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Water spray bars shall be available and operated, as necessary, on the crushers, screens, and all material transfer points whenever the crushing and screening facility is in operation to maintain compliance with the opacity limitations in Sections, III.A.2 and III.A.3 (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 averaged over 6 consecutive minutes (ARM 17.8.749).
5. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation in Section III.A.4 (ARM 17.8.749).
6. Total crushing production of all crushers shall not exceed 7,200 tons during any rolling 24-hour time period (ARM 17.8.749).
7. Total screening production of all screens shall be limited to 16,800 tons during any rolling 24-hour time period (ARM 17.8.749).
8. The generator used with this facility shall not have a designated capacity greater than 755 horsepower (hp) (ARM 17.8.1204).
9. Operation of the 755 hp diesel-powered engine/generator shall not exceed 23 hours per day (ARM 17.8.749).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another nonattainment location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Production information for the sites covered by this addendum must be maintained for 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 fuel used by each generator/engine at each site;
 - f. Hours of operation and size of engine 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 and screening production. Schellinger shall sum the total crushing and screening production during the previous 24 hours to verify compliance with the limitation in Sections III.A.7., III.A.9, and III.B.6, and III.B.7. 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 along with the annual emission inventory (ARM 17.8.749).
4. Schellinger shall document, by day, the hours of operation of the crusher, screen and diesel fired engine/generator. Schellinger shall sum the hours during the previous 24 hours to verify compliance with the limitation in Sections III.A.6, III.A.8 and III.A.11 and III.B.9. 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 along with the annual emission inventory (ARM 17.8.749).

Addendum 5 Analysis
Schellinger Construction Company, Inc.
MAQP #3257-04

I. Permitted Equipment

Schellinger Construction Company, Inc. (Schellinger) owns and operates a portable crushing and screening facility operated at various locations across Montana. Equipment used at this facility includes: a portable jaw crusher (up to 300 tons per hour (TPH)), an attached 3-deck screen (up to 700 TPH), diesel engine/generator (up to 755 horsepower (hp)), and associated material handling and processing equipment.

II. Source Description

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

III. Permit History

On June 4, 2003, Schellinger was issued **MAQP #3257-00** and **Addendum 1** for the construction and operation of a portable crushing and screening facility. The permit and addendum allowed the facility to operate at various locations across Montana, including in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

On March 17, 2004, the Department of Environmental Quality (Department) issued a permit amendment to Schellinger to add three additional operation sites to the addendum for potential winter locations. 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 add the sites. **MAQP #3257-01** replaced MAQP #3257-00 and **Addendum 2** replaced Addendum 1.

On November 30, 2006, Schellinger requested the Department: update MAQP #3257-01 to reflect the current emission factors; update the emissions inventory; include current Department language regarding spray bar requirements; and include additional pits for winter season operations. The Department updated Schellinger's permit as requested. **MAQP #3257-02** replaced MAQP #3257-01 and **Addendum 2** replaced Addendum 1.

On February 2, 2007, the Department received a request from Schellinger to modify MAQP #3257-02. Schellinger requested to increase the production limit on the screen from 250 TPH to 450 TPH. **MAQP #3257-03** replaced MAQP #3257-02 and **Addendum 3** replaced Addendum 2.

IV. Current Permit Action

On June 10, 2009, the Department received a request from Schellinger to modify MAQP #3257-03. This permit action increases the size of the engine/generator from 520 kilowatts (kw) up to 755 hp, increases the production limit of the screen from 450 TPH to 700 TPH, and increases the crushing production from 250 TPH to 300 TPH. **MAQP #3257-04** and **Addendum 5** replace MAQP #3257-03 and Addendum 3.

V. 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. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

- A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack 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 shall 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 one year. Also, the conditions and limitations in Addendum 3 to Permit #3257-03 will prevent Schellinger from having a significant impact on certain PM₁₀ nonattainment areas.

V. Emission Inventory

Winter Nonattainment Area Emissions						
Emission Source	Emissions (pounds/day (lb/day))					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Crusher (up to 300 TPH)	4.59	2.07				
3-deck screen (up to 700 TPH)	19.64	6.60				
Bulk loading	4.28	0.43				
Material transfer	3.75	1.23				
Pile forming	85.68	40.16				
Diesel engine/generator (up to 755 hp)	21.18	21.18	298.41	23.78	64.30	19.73
Haul roads	34.75	9.88				
Total	173.87	81.55	298.41	23.78	64.30	19.73

Summer Nonattainment Area Emissions						
Emission Source	Emissions (pounds/day (lb/day))					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Crusher (up to 300 TPH)	8.64	3.89				
3-deck screen (up to 700 TPH)	39.96	12.43				
Bulk loading	5.38	0.54				
Material transfer	11.76	3.86				
Pile forming	161.28	75.60				
Diesel engine/generator (up to 755 hp)	38.20	38.20	538.32	42.89	116.00	35.60
Haul roads	27.80	7.90				
Total	290.02	142.42	538.32	42.89	116.00	35.60

Winter Season – Nonattainment Area

Crusher (up to 300 TPH)

Maximum Process Rate:: 300 ton/hr
Adjusted Process Rate: 300 ton/hr
Hours of operation: 12.75 hr/day or 4653.75 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 * 300 ton/hr = 0.36 lb/hr
Daily Calculations: 0.36 lb/hr * 12.75 hr/day = 4.59 lb/day
Annual Calculations: 0.36 lb/hr * 4653.75 hr/yr * 0.0005 ton/lb = 0.84 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 * 300 ton/hr = 0.162 lb/hr
Daily Calculations: 0.162 lb/hr * 12.75 hr/day = 2.07 lb/day
Annual Calculations: 0.162 lb/hr * 4653.75 hr/yr * 0.0005 ton/lb = 0.38 ton/yr

Screen (up to 700 TPH)

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Hours of operation: 12.75 hr/day or 4653.75 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.0022 \text{ lb/ton} * 700 \text{ ton/hr} =$ 1.54 lb/hr
 Daily Calculations: $1.54 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 19.64 lb/day
 Annual Calculations: $1.54 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 3.58 ton/yr

PM-10 Emissions:

Emission Factor: 0.00074 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.00074 \text{ lb/ton} * 700 \text{ ton/hr} =$ 0.52 lb/hr
 Daily Calculations: $0.518 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 6.60 lb/day
 Annual Calculations: $0.518 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 1.21 ton/yr

Bulk Loading

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Number of Material Transfer: 3 Load (per MAQP# 3257-03)
 Hours of operation: 4653.75 hr/yr or 12.75 hr/day

PM Emissions:

Emission Factor: 0.00016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.00016 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ Load} =$ 0.34 lb/hr
 Daily Calculations: $0.336 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 4.28 lb/day
 Annual Calculations: $0.336 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.78 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.000016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.000016 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ Load} =$ 0.03 lb/hr
 Daily Calculations: $0.0336 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 0.43 lb/day
 Annual Calculations: $0.0336 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.08 ton/yr

Material Transfers

Maximum Process Rate: 700 ton/hr
 Adjusted Process Rate: 700 ton/hr
 Number of Material Transfer: 3 number of Transfers (per MAQP# 3257-03)
 Hours of operation: 4653.75 hr/yr or 12.75 hr/day

PM Emissions:

Emission Factor: 0.00014 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.00014 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ number of Transfers} =$ 0.29 lb/hr
 Daily Calculations: $0.294 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 3.75 lb/day
 Annual Calculations: $0.294 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.68 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: $0.000046 \text{ lb/ton} * 700 \text{ ton/hr} * 3 \text{ number of Transfers} =$ 0.10 lb/hr
 Daily Calculations: $0.0966 \text{ lb/hr} * 12.75 \text{ hr/day} =$ 1.23 lb/day
 Annual Calculations: $0.0966 \text{ lb/hr} * 4653.75 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$ 0.22 ton/yr

Pile Forming (3 Piles)

Maximum Process Rate: 700 ton/hr
Adjusted Process Rate: 700 ton/hr
Number of Piles: 3 Piles
Hours of operation: 4653.75 hr/yr or 12.75 hr/day

PM Emissions:

Emission Factor: 0.0032 lb/ton (AP-42, Section 13.2.4, 1/95)
Hourly Calculations: 0.0032 lb/ton * 700 ton/hr * 3 Piles = 6.72 lb/hr
Daily Calculations: 6.72 lb/hr * 12.75 hr/day = 85.68 lb/day
Annual Calculations: 6.72 lb/hr * 4653.75 hr/yr * 0.0005 ton/lb = 15.64 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 * 700 ton/hr * 3 Piles = 3.15 lb/hr
Daily Calculations: 3.15 lb/hr * 12.75 hr/day = 40.16 lb/day
Annual Calculations: 3.15 lb/hr * 4653.75 hr/yr * 0.0005 ton/lb = 7.33 ton/yr

Engine/Generator (up to 755 hp)

Generator Size = 520 KW (per application)
Engine rating 755.00 hp

Hours of Operation: 4653.75 hr/yr or 12.75 hr/day (modeling threshold)

PM Emissions:

Emission Factor 0.0022 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.0022 lb/hp-hr = 1.66 lb/hr
Daily Calculations 755 hp * 0.0022 lb/hp-hr * 12.75 hr/day = 21.18 lb/day
Annual Calculations 755 hp * 0.0022 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 3.86 ton/yr

PM-10 Emissions:

Emission Factor 0.0022 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.0022 lb/hp-hr = 1.66 lb/hr
Daily Calculations 755 hp * 0.0022 lb/hp-hr * 12.75 hr/day = 21.18 lb/day
Annual Calculations 755 hp * 0.0022 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 3.86 ton/yr

NOx Emissions:

Emission Factor 0.031 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.031 lb/hp-hr = 23.41 lb/hr
Daily Calculations 755 hp * 0.031 lb/hp-hr * 12.75 hr/day = 298.41 lb/day
Annual Calculations 755 hp * 0.031 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 54.46 ton/yr

VOC Emissions:

Emission Factor 0.00247 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.00247 lb/hp-hr = 1.86 lb/hr
Daily Calculations 755 hp * 0.00247 lb/hp-hr * 12.75 hr/day = 23.78 lb/day
Annual Calculations 755 hp * 0.00247 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 4.34 ton/yr

CO Emissions:

Emission Factor 0.00668 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.00668 lb/hp-hr = 5.04 lb/hr
Daily Calculations 755 hp * 0.00668 lb/hp-hr * 12.75 hr/day = 64.30 lb/day
Annual Calculations 755 hp * 0.00668 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 11.74 ton/yr

SOx Emissions:

Emission Factor 0.00205 lb/hp-hr (AP-42 Table 3.3-1,diesel fuel - uncontrolled, 10/96)
Hourly Calculations 755 hp * 0.00205 lb/hp-hr = 1.55 lb/hr
Daily Calculations 755 hp * 0.00205 lb/hp-hr * 12.75 hr/day = 19.73 lb/day
Annual Calculations 755 hp * 0.00205 lb/hp-hr * 4653.75 hr/yr * 0.0005 tons/lb = 3.60 ton/yr

Summer Season – Nonattainment Area

See Emission Inventory in the permit analysis for MAQP #3257-04

VII. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). Because certain areas exceeded the national standards for PM₁₀, 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 PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM₁₀ emissions.

MAQP #3257-04 and Addendum 5 are for a portable crushing and screening facility that will locate at sites in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects on air quality will be minor and short-lived.

VIII. Air Quality Impacts

MAQP #3257-04 and Addendum 5 will cover the operations of this portable crushing and screening facility while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum 5 will cover the operations of this portable crushing and screening facility while operating in or within 10 km of the certain PM₁₀ nonattainment area (specific site during the winter months (October 1 through March 31). The Department modeled this source to evaluate an air quality impacts (using Screen 3) and determined that with an engine stack height of at least 15.3 feet, impacts to air quality would be minimal. Schellinger agreed to increase the nominal stack height approximately 2 feet. Addendum 5 will contain a permit condition whereby the minimum stack height shall be at least 15.3 feet and the stack diameter shall be 0.5 feet. Additionally, the facility will also be allowed to operate in or within 10 km of PM₁₀ nonattainment areas during the summer months (April 1 through September 30).

IX. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking for MAQP #3257-04 and damaging assessment and determined there are no taking or damaging implications.

X. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Schellinger Construction Company, Inc.

Montana Air Quality Permit #: 3257-04

Preliminary Determination Issued: 07/24/09

Department Decision Issued: 08/26/09

Permit Final: 09/11/09

1. *Legal Description of Site:* MAQP #3257-04 would apply to the source while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

Addendum 5 and MAQP #3257-04 would apply to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

2. *Description of Project:* On June 10, 2009, the Department received a request from Schellinger to modify MAQP #3257-03. This permit modification increases the size of the diesel engine/generator from 520 kW up to 755 hp, increases the production limit of the screen from 450 TPH to 700 TPH, and increases the production of the crusher from 250 TPH to 300 TPH.
3. *Objectives of Project:* The objective of this permitting action would be for Schellinger to increase the size of their diesel engine and screen, and to update the equipment inventory of their existing plant.
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 #3257-04 and Addendum 5.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

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

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

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing and screening operation. However, this permit modification would result in minor additional emissions, and the plant would only operate intermittently and seasonally. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations). This permit action would not need any additional water for pollution control. Since only a minor amount of additional air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary effects to aquatic life and habitat would be expected due to the proposed permit modification.

B. Water Quality, Quantity and Distribution

This permit action would not result in additional water for dust suppression. Additionally, increasing the size of diesel engine to this existing plant would not cause an increase in water consumption. Any pollutant deposition in the area would be seasonal and intermittent given the portable nature of the existing crushing and screening operation. There would be no additional impacts to water resources and therefore, no surface and groundwater quality impacts would be expected.

C. Geology and Soil Quality, Stability and Moisture

The proposed permit modification would have minor impacts on geology and soil quality, stability and moisture because deposition of air pollutants on soils would be minor (see Section 8.F of this EA). Only minor amounts of additional pollution would be generated. Pollutants would be widely dispersed before settling upon vegetation and surrounding soils (see Section 8.D of this EA). According to the applicant, Schellinger would not disturb any new soils because Schellinger proposes to locate the diesel engine at an existing pit. Schellinger does not intend to modify any unique geologic or physical features. Therefore, any additional effects upon geology and soil quality, stability, and moisture at this site would be minor and short-term.

D. Vegetation Cover, Quantity, and Quality

The operation of the diesel engine/generator and the increased production capacity of the screen would cause few additional emissions. This equipment would typically operate in areas previously designated and used for this type of operation. Minor impacts would occur on vegetative cover, quality, and quantity because this facility would be operating on an intermittent and temporary basis. Pollutants would be greatly dispersed and corresponding deposition on vegetation from the proposed project would be minor. The Department contacted MNHP and they noted that there are no known vegetative species of concern at the proposed location. Therefore, given the temporary and portable nature of this operation and the fact that there are no known vegetative species of concern, and that pollutants would be widely dispersed; minor impacts to vegetative cover, quantity and quality would occur as a result of this project.

E. Aesthetics

The crushing and screening operation would be visible and would create additional noise while operating in these areas. However, MAQP #3257-04 and Addendum 5 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing and screening operation is portable, would operate on an intermittent and seasonal basis, and would typically locate within an existing open-cut pit, any visual and noise impacts from the diesel engine and increased production of the screen would be minor and short-lived. Therefore, impacts to area aesthetics as a result of the proposed permit modification would be minor.

F. Air Quality

The air quality impacts from the crushing and screening operations would be minor because the facility is relatively small, and this permit modification would result in a minor increase of emissions. MAQP #3257-04 and Addendum 5 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP #3257-04 and Addendum 5 would limit total emissions from the crushing and screening operation, and would limit the operation of the diesel engine, and any additional Schellinger equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

This facility would be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the modification of MAQP #3257-04 and Addendum 5 would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction) and would have minimal deposition on the surrounding area. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources contacted the Montana National Heritage Program (MNHP). Search results inferred that two sensitive vertebrate animals known as the Gray Wolf and Black Tern might be located near or within the existing pit. However, the extent of the Gray Wolf habitat area is substantial and it is unlikely that the Gray Wolf would locate near the diesel engines or the industrial activity. It is unusual for a wild wolf to associate or interact with people, or linger near buildings for extended periods of time. Therefore, it is unlikely that the Gray Wolf would locate near the diesel engines or the existing open cut pit and impacts would be minor.

The Black Tern is considered an air breeding habitat and is generally found in freshwater marshes across most of Canada, the northern United States and much of Europe and western Asia. They usually nest either on floating material in a marsh or on the ground very close to water, laying 2-4 eggs. These birds do not dive for fish, but forage on the wing picking up items at or near the water's surface or catching insects in flight. They mainly eat insects and fish as well as amphibians. The location of concern for this species is approximately 1 mile east of the existing pit. It is unlikely that the permit modification would cause harm to this species.

This operation would be considered portable and temporary in nature, and any impacts to the gray wolf and Black Tern would likely be short-term. Given the relatively small size of the facility, the probability that the facility would locate in a previously disturbed area, and the temporary and portable nature of the operations, any impacts would be minor and short-lived. Additionally, operational conditions and limitations within MAQP #3257-04 and Addendum 5 would aid in the protection of these resources by protecting the surrounding environment. Therefore, the impacts to unique endangered, fragile or limited environmental resources would be minor.

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

The operation of the diesel engine/generator and the increased production capacity of the screen would not require any additional water. Impacts to air resources would be minimal because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations. Energy requirements would also be small because the energy demands of the crushing and screening operation would be relatively minor and the facility would not be used continuously. The facility would have limited production, and would have seasonal and intermittent use. Because air pollutants generated by the engine would be widely dispersed (see Section 8.F of this EA) and energy requirements would be met by the diesel engine, water use would be minimal and any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites located near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there are no previously recorded historic or archaeological sites within the proposed area. However, SHPO stated that the absence of cultural properties in the area does not mean that they do not exist, but may reflect a lack of previous cultural resource inventories in the area. The Department determined that the chance of the existing facility impacting any historical and archaeological sites in the area would be minor due to the relatively small size of the project.

J. Cumulative and Secondary Impacts

The operation of the diesel engine/generator and the increased production capacity of the screen would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility is an existing source and would be limited in the amount of PM, PM₁₀, NO_x, VOC, CO, and SO_x emissions generated. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

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

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

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

A. Social Structures and Mores

The operation of the diesel engine/generator and the increased production capacity of the screen would cause no additional disruption to the social structures and mores in the area because the source is a minor source of emissions (by industrial standards), and would be located at an existing open pit, and would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #3257-04 and Addendum 5. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result.

B. Cultural Uniqueness and Diversity

The impacts to cultural uniqueness and diversity of this area would be minor due to modification of the current permit. The predominant use of the area is an existing gravel pit surrounded by agricultural operations (wheat and barley). Because the predominant use of this area has historically been crushing and screening operations, and the fact that this operation would not change as a result of adding an engine or increasing screen production, there would be minor impacts resulting from this permit modification. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Therefore, the cultural uniqueness and diversity of the area could experience minor impacts.

C. Local and State Tax Base and Tax Revenue

The operation of a diesel engine/generator and the increased production capacity of the screen to an existing crushing and screening operation would have little, if any, impact on the local and state tax base and tax revenue because the facility would be considered a relatively small industrial source (minor source) and would be used on a seasonal and intermittent basis. In general the facility requires the use of only a few employees (6-12) and the permit modification would require no additional employees. Thus, only minor, if any, impacts to the local and state tax base and revenue could be expected from this change to facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The operation of a diesel engine/generator and the increased production capacity of the screen would occur in an existing pit that covers approximately 320 acres. The diesel engine/generator would not have an impact on local industrial production since the engine's operation would be minimal and emissions from the engines would be minor. Also, the portable facility would generally locate in a rural area. Minimal deposition of air pollutants would occur on the surrounding land (see Section 8.F of this EA) and only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the engine's operation would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation (see Section 8.D of this EA). Overall, the additional impacts to agricultural or industrial production would be minor.

E. Human Health

MAQP #3257-04 and Addendum 5 would incorporate conditions to ensure that the crushing and screening facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. The additional emissions from this permit modification are minimal, however, any air emissions from this facility would be minimized by the use of water spray and other conditions that were established in the MAQP. Therefore, only minor impacts would be expected upon human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

MAQP #3257-04 and Addendum 5 would incorporate conditions to ensure that the diesel engine would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to protect human health. Air emissions from this facility would be minimized by the use of water and other process limits that would be required by

MAQP #3257-04 and Addendum 5. Because the facility would operate on a temporary basis and pollutants would be widely dispersed, only minor impacts would be expected on human health from the operation of the diesel engine and increased production of the screen at the existing crushing and screening facility. Any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

According to the applicant, the plant operation would require approximately 6-12 employees. However, this permit modification would not require any additional employees. Other employees that would be associated with the plant would be a transient (e.g. truck drivers for aggregate, load out, etc.). Because the operation would be seasonal and temporary, no individuals would be expected to permanently relocate as a result of this permit modification. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing and screening operation is small and would require few employees to operate. Also, no individuals would be expected to permanently relocate to a given area of operation as a result of the increased size of the diesel engine and the increased production of the screen. Overall, the facility would have intermittent and seasonal operations. Therefore, this permit action would not disrupt the normal population distribution in a given area of operation.

I. Demands for Government Services

The increased size of the diesel engine/generator and the increased screen production at the existing crushing and screening facility would cause minimal, additional demand for government services. This project would not result in an increase in traffic on existing roadways. Government services would be required for acquiring the appropriate permits for the proposed project, and to verify compliance with the permits that would be issued. However, any increase or demand for government services would be minor given the temporary and portable nature of the project.

J. Industrial and Commercial Activity

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

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would affect Schellinger's operation. The facility would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. MAQP #3257-04 and Addendum 5 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Addendum 5 and MAQP #3257-04 would apply to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀

nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31). Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

Operation of the diesel engine/generator and an increase in screen production would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be portable and temporary. Further, no other industrial operations are expected to result from the permitting of this facility. Any minor increase in traffic would have little effect on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Thus, only minor and temporary cumulative and secondary effects would result.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action would be to increase the size of the diesel engine/generator and increase the crushing and screening production at an existing facility. MAQP #3257-04 and Addendum 5 include conditions and limitations to ensure the facility would 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: Jenny O'Mara

Date: July 1, 2009