



Montana Department of  
**ENVIRONMENTAL QUALITY**

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October 9, 2009

Mr. Rob Koelzer  
Schellinger Construction Co., Inc  
P.O. Box 39  
Columbia Falls, MT 59912

Dear Mr. Koelzer:

Montana Air Quality Permit #4070-01 is deemed final as of October 9, 2009, by the Department of Environmental Quality (Department). This permit is for a portable crushing operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

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

VW:SJ  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #4070-01

Schellinger Construction Co., Inc  
P.O. Box 39  
Columbia Falls, MT 59912

October 9, 2009



## MONTANA AIR QUALITY PERMIT

Issued To: Schellinger Construction Co., Inc. MAQP: #4070-01  
P.O. Box 39 Application Complete: 7/13/2009  
Columbia Falls, MT 59912 Preliminary Determination Issued: 8/21/2009  
Department's Decision Issued: 9/23/2009  
Permit Final: 10/9/2009  
AFS #: 777-4070

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

### SECTION I: Permitted Facilities

#### A. Plant Location

Schellinger operates a portable crushing facility to be located in the NW ¼ of Section 16, Township 29 North, Range 22 West, in Flathead County, Montana. However, MAQP #4070-01 applies 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. MAQP #4070-01 and Addendum #2 apply while operating in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.*

#### B. Current Permit Action

On June 10, 2009, the Department received a permit modification application from Schellinger. Additional information, following conference calls and an incompleteness letter, was received June 17, 2009, July 8, 2009, and July 13, 2009. The Department considered the application complete on July 13, 2009. The modification permits the use of a smaller diesel powered engine/generator to allow for more hours of operation in nonattainment areas. The permit was also updated to reflect the current permit language, format, 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 Code of Federal Regulations (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 discharge 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 17.8.304).
4. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).
5. 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 17.8.749).
7. Schellinger shall not operate more than one crusher at any given time and the maximum rated design capacity shall not exceed 500 tons per hour (ARM 17.8.749).
8. Crushing production is limited to 4,380,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. Schellinger shall not operate more than one diesel-fired engine/generator at any given time and the maximum rated design capacity shall not exceed 755 horsepower (hp) (ARM 17.8.749).
10. Operation of the diesel engine/generator shall not exceed 8,500 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
11. 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 period. Any calculations used to establish production levels shall be approved by the Department of Environmental Quality (Department) (ARM 17.8.749).
12. 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*, as applicable (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
13. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

#### B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).

2. The Department may require testing (ARM 17.8.105).
3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

C. Operational Reporting Requirements

1. If this crushing 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. The records compiled in accordance with this permit shall be maintained by Schellinger as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
5. Schellinger shall document, by month, the crushing production from the facility. By the 25<sup>th</sup> day of each month, Schellinger shall calculate the crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Schellinger shall document, by month, the hours of operation of the diesel engine/generator. By the 25<sup>th</sup> 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.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. Schellinger shall 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).

### SECTION III: Addendum

Schellinger shall comply with all conditions in Addendum #2 to MAQP #4070-01, as applicable (ARM 17.8.749).

### SECTION IV: 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 a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Schellinger may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Schellinger shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Permit Analysis  
Schellinger Construction Company, Inc.  
Montana Air Quality Permit (MAQP) #4070-01

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, Montana. However, the facility is allowed to move to various locations throughout Montana, except those areas with a Department of Environmental Quality (Department) – approved permitting program and those areas considered tribal lands. MAQP #4070-01 and Addendum #2 apply while operating in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

A. Permitted Equipment

The facility is permitted to operate one crusher with a maximum material throughput capacity not to exceed 500 tons per hour (TPH) (currently a 1997 Nordberg Cone Crusher), a diesel-fired engine/generator with a maximum rated design capacity not to exceed 755 horsepower (hp) (currently a manufacture year of 1980), and associated material handling equipment. The facility consists of the following equipment:

- One (1) Cone Crusher (500 TPH);
- One (1) 755 hp diesel-fired engine/generator; and
- Associated equipment

B. Source Description

Schellinger proposes to use this crushing plant and associated equipment to crush gravel materials for use in various construction operations. The facility will most likely be used in conjunction with other equipment (screens, conveyor belts, etc.) owned and operated by Schellinger but permitted under the authority of a separate MAQP.

C. Permit History

**MAQP #4070-00** and **Addendum 1** were issued final on June 28, 2007, for operation of a cone crusher, 1,000 kilowatt (kW) generator, and associated equipment. The permit also contained an Addendum to operate in or within 10 km of the PM<sub>10</sub> nonattainment areas of Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish during the summer season (April 1 – September 30) and the NW ¼ of Section 16, Township 29 North, Range 22 West, Flathead County, MT (3431 Farm to Market Road) in the winter season (October 1 – March 31).

D. Current Permit Action

On July 13, 2009, the Department received a complete MAQP application for portable sources from Schellinger for modifications to their current permit. Modifications include requested changes to the diesel powered engine/generator size and changes to production limitations. **MAQP #4070-01** replaces MAQP #4070-00 and **Addendum 2** replaces Addendum 1.



E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Schellinger shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.213 Ambient Air Quality Standard for Ozone
5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Schellinger must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Schellinger shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Schellinger is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
  - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Schellinger, the current portable crushing equipment to be used under MAQP #4070-01 is subject to this subpart because the crusher was manufactured after August 31, 1983.
  - 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 by a diesel engine that was manufactured in 1980; therefore, this CI ICE is not subject to this Subpart. However, should Schellinger utilize a stationary CI ICE that is manufactured after April 1, 2006, this Subpart would apply.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
  - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). 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 permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Schellinger has a PTE greater than 15 tons per year of particulate matter (PM), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.  
(1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Schellinger submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Schellinger submitted an affidavit of publication of public notice for the June 5, 2009, issue of the *Daily Inter Lake*, a newspaper of general circulation in the town of Kalispell in Flathead County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
  2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
  2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4070-01, the following conclusions were made:
    - a. The facility's PTE is less than 100 tons/year for any pollutant.
    - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
    - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
    - d. This facility is subject to current NSPS (40 CFR 60, Subpart OOO).
    - e. This facility is currently not subject to current National Emissions Standards 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.

Based on these facts, the Department determined that this facility is not subject to the Title V Operating Permit Program because Schellinger requested federally enforceable limitations to keep the facility below Title V permitting thresholds. 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 an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

### III. BACT Determination

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

#### Diesel Engine/Generator

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.

In addition, any newly built diesel engine/generator would be required to comply with the federal engine emission limitations including either EPA Tier 2 emission standards for non-road engines (40 CFR Part 1039) or New Source Performance Standard emission limitations for stationary engines (40 CFR 60, Subpart IIII).

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

Emission Inventory\*\*

**Schellinger Construction Company**  
**Emissions Inventory - Controlled**

Source	Tons/Year					
	PM	PM-10	NOx	VOC	CO	SOx
Nordberg HP400 Cone Crusher - 500 TPH	2.63	1.18				
CAT Deisel Generator 3512 - 755 hp	7.06	7.06	99.47	8.02	21.50	6.74
Transfer Operations	0.92	0.30				
Pile Forming	14.02	6.57				
Bulk Loading	14.02	6.57				
Haul Roads	5.49	2.05				
<b>Total</b>	<b>44.14</b>	<b>23.73</b>	<b>99.47</b>	<b>8.02</b>	<b>21.50</b>	<b>6.74</b>

\*\* PM = particulate matter  
 PM<sub>10</sub> = particulate matter with an aerodynamic diameter of 10 microns or less  
 NO<sub>x</sub> = oxides of nitrogen  
 VOC = volatile organic carbons  
 CO = carbon monoxide  
 SO<sub>x</sub> = oxides of sulfur



## CRUSHERS

### **Nordberg HP400 Cone Crusher**

Process Rate: 500.0000 tons/hr  
Hours of operation: 8760.0000 hr/yr or 24 hr/day

#### PM Emissions (controlled):

Emission Factor: 0.0012 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)  
Calculations: 0.0012 lbs/ton \* 500 tons/hr = 0.600 lbs/hr  
0.6 lbs/hr \* 8760 hr/yr \* 0.0005 ton/lb = **2.628** tons/yr

#### PM-10 Emissions (controlled):

Emission Factor: 0.00054 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)  
Calculations: 0.00054 lbs/ton \* 500 tons/hr = 0.270 lbs/hr  
0.27 lbs/hr \* 8760 hr/yr \* 0.0005 ton/lb = **1.183** tons/yr

## Material Transfer

Process Rate: 500.0000 tons/hr  
Number of Transfers: 3.0000 Transfers  
Hours of operation: 8760.0000 hr/yr or 24 hr/day

#### PM Emissions:

Emission Factor: 0.000140 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)  
Calculations: 0.00014 lbs/ton \* 500 tons/hr \* 3 Transfer = 0.210 lbs/hr  
0.21 lbs/hr \* 8760 hr/yr \* 0.0005 ton/lb = **0.920** tons/yr

#### PM-10 Emissions:

Emission Factor: 0.000046 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)  
Calculations: 0.000046 lbs/ton \* 500 tons/hr \* 3 Transfers = 0.069 lbs/hr  
0.069 lbs/hr \* 8760 hr/yr \* 0.0005 ton/lb = **0.302** tons/yr

## **Pile Forming (1 Pile) -**

Process Rate: 500.0000 tons/hr  
Hours of operation: 8760.0000 hr/yr or 24 hr/day

#### PM Emissions:

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

where:

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

k = 0.74 for PM  
k = 0.35 for PM10  
M = 1.72 %  
U = 9.10 MPH

average moisture content observed in mineral processing: AP-42 table 11.19.2-1 note b  
statewide average : <http://met-www.cit.cornell.edu/ccd/wndspd98.html>

PM E = 0.0064 lbs/ton  
PM10 E = 0.0030 lbs/ton

#### PM Emissions:

Emission Factor: 0.0064 lbs/ton (AP 42 13.2.4, 11/06)  
Calculations: 0.0064 lbs/ton \* 500 tons/hr = 3.200 lbs/hr  
3.2 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = **14.016** tons/yr

#### PM-10 Emissions:

Emission Factor: 0.0030 lbs/ton (AP 42 13.2.4, 11/06)  
Calculations: 0.003 lbs/ton \* 500 tons/hr = 1.500 lbs/hr  
1.5 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = **6.570** tons/yr

## **Bulk Loading**

Process Rate: 500.0000 tons/hr  
Hours of operation: 8760.0000 hr/yr

#### PM Emissions:

Emission Factor: 0.0064 lbs/ton (AP 42 13.2.4, 11/06)  
Calculations: 0.0064 lbs/ton \* 500 tons/hr = 3.200 lbs/hr  
3.2 \* 8760 hr/yr \* 0.0005 tons/lb = **14.016** TPY

#### PM10 Emissions:

Emission Factor: 0.0030 lbs/ton (AP 42 13.2.4, 11/06)  
Calculations: 0.003 lbs/ton \* 500 tons/hr = 1.500 lbs/hr  
1.5 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = **6.570** tons/yr

**Generators**

Rated hp: 755.0000 hp  
8500.0000 hrs or

**PM Emissions - hP**

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations: 0.0022 lb/hP-hr \*755 hP = 1.661 lb/hr  
1.661 lbs/hr \*8500 hrs \* 0.0005 tons/lb = **7.059 tons/yr**

**PM-10 Emissions** assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)  
1.661 lb/hr  
**7.059 tons/yr**

**NO<sub>x</sub>**

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations: 0.031 lb/hP-hr \*755 hP = 23.405 lb/hr  
23.405 lbs/hr \*8500 hrs \* 0.0005 tons/lb : **99.471 tons/yr**

**CO**

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations: 0.0067 lb/hP-hr \*755 hP = 5.059 lb/hr  
5.059 lbs/hr \*8500 hrs \* 0.0005 tons/lb = **21.501 tons/yr**

**SO<sub>x</sub>**

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations: 0.0021 lb/hP-hr \*755 hP = 1.586 lb/hr  
1.586 lbs/hr \*8500 hrs \* 0.0005 tons/lb = **6.741 tons/yr**

**VOC**

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations 0.0025 lb/hp-hr \*755 hp = 1.888 lb/hr  
1.888 lb/hr \*8500 hrs \* 0.0005 tons/lb = **8.024 tons/yr**

**Total HAPs**

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)  
Conversion Factor 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)  
Calculations 7000 BTU/hp-hr \*755 hp \*0.0037 lb/MMBTU \* 10<sup>-6</sup> MMBTU/BTU = 0.020 lb/hr  
0.02 lb/hr \*8500 hr \* 0.0005 tons/lb = **0.085 ton/yr**

## Haul Roads

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

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

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

s = 7.1 %

W = 50 tons

Vehicle Miles Traveled: 5 VMT/day {Estimated}

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

\*Assumed equivalent to total suspended particulate matter (TSP)

\*\* - not used in the emission factor equation

PM Emissions:

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

a = 0.7

b = 0.45

k = 4.9

E = 12.035995 lb/VMT

Control Factor = 50.00%

PM= 30.09 Lbs/day  
**5.49 ton/yr**

PM10 Emissions:

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

a = 0.9

b = 0.45

k = 1.5

E = 4.5030949 lb/VMT

PM= 11.26 Lbs/day  
**2.05 ton/yr**

## IV. Existing Air Quality

MAQP #4070-01 allows the operation of the Schellinger equipment at various locations throughout Montana. The areas covered by MAQP #4070-01 are designated as attainment/unclassified for the ambient air quality standards. Addendum 2 to Permit #4070-01 allows Schellinger to operate in certain PM<sub>10</sub> nonattainment areas during both the summer and winter months.

## V. Air Quality Impacts

MAQP #4070-01 would be issued for continued operation of a portable crushing and screening plant. The current permit action modifies the size of the diesel engine/generator associated with this facility. MAQP #4070-01 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 would be expected to be temporary.

SCREEN VIEW, an air dispersion modeling program based on EPA approved SCREEN 3 modeling software, was conducted for MAQP #4070-01 and Addendum 2 to determine the potential for ambient air quality impacts. Worst-case modeling results were compared to air quality standards to determine if additional analysis or limitations were necessary. Based on the modeling results, Addendum 2 also contains more restrictive restrictions to protect the air quality when this facility operates in and within 10 km of certain nonattainment areas.

VII. Ambient Air Impact Analysis

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

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

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

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

IX. Environmental Assessment

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

**Addendum 2**  
Schellinger Construction Co., Inc.  
Permit #4070-01

An addendum to Montana Air Quality Permit (MAQP) #4070-01 is issued to Schellinger Construction Co., Inc. (Schellinger) pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

The facility is permitted to operate one crusher with a maximum material throughput capacity not to exceed 500 tons per hour (TPH), a diesel-fired engine/generator with a maximum rated design capacity not to exceed 755 horsepower (hp), and associated material handling equipment.

Schellinger operates at various locations throughout Montana, including in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas during the summer season: Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish. Winter season (October 1-March 31) nonattainment operations are permitted for the NW ¼ of Section 16, Township 29 North, Range 22 West, in Flathead County, MT.

II. Seasonal and Site Restrictions

MAQP #4070-01 and Addendum 2 apply to Schellinger while operating at any location in or within 10 km of certain PM<sub>10</sub> 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 PM<sub>10</sub> nonattainment areas where Schellinger may operate is:
- NW ¼ of Section 16, Township 29 North, Range 22 West, Flathead County, MT (3431 Farm to Market Road, Tutvedt Pit 2); and
  - 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 Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM<sub>10</sub> nonattainment areas.
- C. Schellinger shall comply with the limitations and conditions contained in Addendum 2 to MAQP #4070-01 while operating in or within 10 km of any of the previously identified PM<sub>10</sub> nonattainment areas. Addendum 2 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 2 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Limitations and Conditions – **Winter Season (October 1 – March 31)**

1. Water spray bars must be operated, when necessary, on the crusher and all transfer points whenever the crushing plant is in operation (ARM 17.8.749).

2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any equipment, such as crushers and transfer points, any emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Schellinger shall not cause or authorize to be discharged into the atmosphere from 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).
4. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. Schellinger shall not operate more than one crusher at any one time. Total crushing production from the crusher shall not exceed 7,300 tons per day (ARM 17.8.749).
6. Schellinger shall not operate more than one diesel fired engine/generator with a maximum horsepower of 755 hp. The hours of operation of the 755 hp diesel-fired engine/generator shall not exceed 13 hours per calendar-day. The stack shall have an effective diameter of 0.5 feet and have a height of at least 15.3 feet (ARM 17.8.749).

**B. Operational Limitations and Conditions – Summer Season (April 1 – September 30)**

1. Water spray bars must be operated, as necessary, on the crusher and all transfer points whenever the crushing plant is in operation (ARM 17.8.749).
2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any equipment, such as crushers and transfer points, any emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Schellinger shall not cause or authorize to be discharged into the atmosphere from 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).
4. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. Schellinger shall not operate more than one crusher at any one time. Total Crushing production from the crusher shall not exceed 12,000 tons per day (ARM 17.8.749).
6. Schellinger shall not operate more than one diesel fired engine/generator with a maximum rated horsepower of 755 hp. The hours of operation of the 755 hp diesel-fired engine/generator shall not exceed 23.25 hours per calendar-day. The stack shall have an effective diameter of 0.5 feet and a height of at least 15.3 feet (ARM 17.8.749).

**C. Operational Reporting Requirements**

1. If this crushing/screening plant is moved to another nonattainment location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Production information for the sites covered by this addendum must be maintained for 5 years and submitted to the Department upon request. The information must include (ARM 17.8.749):
  - a. Tons of material crushed by the crusher at each site (including amount of recirculated/rerun material);
  - b. Tons of bulk material loaded at each site;
  - c. Daily hours of operation at each site;
  - d. Hours of operation and the size of engine/generator used at each site;
  - e. Gallons of diesel used by each engine/generator
  - f. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles
3. Schellinger shall document, by day, the crushing production of the crusher during the winter season to verify compliance with the limitations in Section III.A.5. A written report of compliance 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 crushing production of the crusher during the summer season to verify compliance with the limitations in Section III.B.5. A written report of compliance 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).
5. Schellinger shall document, by day, the hours of operation of the diesel engine/generator during the winter season to verify compliance with the limitations in Section III.A.6. 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).
6. Schellinger shall document, by day, the hours of operation of the diesel engine/generator during the summer season to verify compliance with the limitations in Section III.B.6. 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 2 Analysis  
Schellinger Construction Co., Inc.  
Montana Air Quality Permit (MAQP) #4070-01

I. Permitted Equipment

Schellinger Construction Co., Inc. (Schellinger) is permitted to operate one crusher with a maximum material throughput capacity not to exceed 500 tons per hour (TPH), a diesel-fired engine/generator with a maximum rated design capacity not to exceed 755 horsepower (hp), and associated material handling equipment. The facility consists of the following equipment:

- One 500 TPH Cone Crusher
- One 755 hp diesel-fired engine/generator; and
- Associated equipment

Schellinger operates at various locations throughout Montana, including in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas in the summer season: Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish, and with winter season operations permitted for the NW ¼ of Section 16, Township 29 North, Range 22 West, Flathead County, Montana.

II. Source Description

Schellinger proposes to use this crushing plant and associated equipment to crush gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the feed hopper and passed through the crusher. Materials are crushed by the crusher. The facility will most likely be used in conjunction with other equipment (screens, conveyor belts, etc.) owned and operated by Schellinger but permitted under the authority of a separate MAQP.

III. Applicable Rules and Regulations

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

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

- A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Schellinger demonstrated compliance with all applicable rules and standards as required for permit issuance.
- B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack which do not result in an increase in emissions because of the changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.



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

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

Schellinger must submit proof of compliance with the transfer and public notice requirements when Schellinger transfers to any of the locations covered by this addendum. Schellinger will only be allowed to stay in the new location for a period of less than 1 year. The conditions and limitations in Addendum 2 to MAQP #4070-01 will prevent Schellinger from having a significant impact on PM<sub>10</sub> nonattainment areas.

IV. Emission Inventory – PM Non-attainment

**Schellinger Construction Company**  
**Emissions Inventory - Winter Non-attainment Area Emissions**

Source	lbs/day					
	PM	PM-10	NOx	VOC	CO	SOx
Nordberg HP400 Cone Crusher - 500 TPH	8.8	3.9				
CAT Deisel Generator 3512 - 755 hp	21.6	21.6	304.3	24.54	65.77	20.6
Transfer Operations	3.1	1.0				
Pile Forming	46.7	21.9				
Bulk Loading	46.7	21.9				
Haul Roads	30.1	11.3				
<b>Total</b>	<b>157.0</b>	<b>81.6</b>	<b>304.3</b>	<b>24.5</b>	<b>65.8</b>	<b>20.6</b>

**Summer Non-attainment Area Emissions**

Source	Lbs/day					
	PM	PM-10	NOx	VOC	CO	SOx
Nordberg HP400 Cone Crusher - 500 TPH	14.41	6.47	0.00	0.00	0.00	0.00
CAT Deisel Generator 3512 - 755 hp	39.87	39.87	561.71	45.29	121.41	38.06
Transfer Operations	5.04	1.64	0.00	0.00	0.00	0.00
Pile Forming	76.82	36.00	0.00	0.00	0.00	0.00
Bulk Loading	76.82	36.00	0.00	0.00	0.00	0.00
Haul Roads	30.08	11.23	0.00	0.00	0.00	0.00
<b>Total</b>	<b>243.04</b>	<b>131.21</b>	<b>561.71</b>	<b>45.29</b>	<b>121.41</b>	<b>38.06</b>

## V. Existing Air Quality

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

MAQP #4070-01 and Addendum #2 are for a portable crushing plant to locate at sites in or within 10 km of certain PM<sub>10</sub> nonattainment areas during the winter season (October 1 through March 31). Winter season (October 1 through March 31) operations may include only the locations listed in Section II.A of Addendum #2. Addendum #2 of MAQP #4070-01 would also allow for summertime operations (April 1 through September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM<sub>10</sub> nonattainment areas.

## VI. Air Quality Impacts

Schellinger is allowed to operate a portable crushing plant to be located at various locations throughout Montana. MAQP #4070-01 and Addendum #2 will cover the Schellinger crushing plant while operating at any location within Montana, excluding those counties that have a Department-approved permitting program and those areas considered tribal lands. In the view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM<sub>10</sub> in the ambient air that exceed the ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal.

SCREEN VIEW air dispersion modeling was conducted for MAQP #4070-01 and Addendum #2 to determine the potential for ambient air quality impacts during winter operations in or within 10 km of a nonattainment area. Worst-case modeling results were compared to relevant air quality standards to determine if additional analysis or limitations were necessary. Based on the modeling results Addendum 2 contains additional restrictions necessary to protect the air quality when this facility operates in the designated PM<sub>10</sub> nonattainment area.

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

## VI. Taking or Damaging Implication Analysis

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

## VII. 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**  
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**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

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

*Montana Air Quality Permit #: 4070-01*

*Preliminary Determination Issued: 8/21/2009*

*Department Decision Issued: 9/23/2009*

*Permit Final: 10/9/2009*

1. *Legal Description of Site:* MAQP #4070-01 would apply while operating at any location in Montana, except those areas having a Department-approved permitting program and areas considered tribal lands. MAQP #4070-01 and Addendum 2 would allow the portable crushing plant to operate in or within 10 km of PM<sub>10</sub> nonattainment areas (Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte) during the summer season (April 1-September 30) and within the NW ¼ of Section 16, Township 29 North, Range 22 West, Flathead County, MT (3431 Farm to Market Road) during the winter season (October 1-March 31).
2. *Description of Project:* The objective of the proposed action is to modify the existing MAQP to allow for greater operational flexibility and change the engine/generator size to 755 hp.
3. *Objectives of Project:* The modifications of this permitting action more accurately reflect the operational needs of this facility.
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 #4070-01 and Addendum 2.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

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

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

**A. Terrestrial and Aquatic Life and Habitats**

The current permitting action would increase the emissions of each pollutant by a very small amount. These extremely small emissions increases would not be expected to result in any discernable impact to terrestrial and aquatic life and habitats in areas in which this equipment is already operating. Minor impacts, if any, would be expected to aquatic life and habitats as a result of this permitting action.

**B. Water Quality, Quantity and Distribution**

The current permitting action would increase the emissions of each pollutant by a very small amount. These extremely small emissions increases would not be expected to result in any discernable impact to water quality in areas in which this equipment is already operating. A very small increase in the amount of water used may be expected. Minor impacts, if any, would be expected to water quantity, quality, and distribution as a result of this permitting action.

**C. Geology and Soil Quality, Stability and Moisture**

The current permitting action would not be expected to have any discernable impacts to soil quality, stability, and moisture. The permitting action would allow for a small increase in operating time allowed in non-attainment areas; therefore minor affects, if any, to geology and soil Quality, Stability and Moisture would be expected as a result of this permitting action.

**D. Vegetation Cover, Quantity, and Quality**

The current permitting action would increase the emissions of each pollutant by a very small amount. These extremely small emissions increases would not result in any discernable impact to vegetation cover, quantity, and quality in areas in which this equipment is already operating. Therefore, minor impacts, if any, would be expected to vegetation cover, quantity, and quality as a result of this permit.

E. Aesthetics

The current permitting action would increase the operation time allowed in non-attainment areas. The crushing and screening operation would be visible and would create additional noise while operating. However, this operation would typically locate within an existing pit. Therefore, minor impacts to area aesthetics would be expected.

F. Air Quality

MAQP #4070-01 contains conditions that would limit emissions to levels determined by the Department, through permitting policy and modeling analysis, which would not cause or contribute to a violation of any current ambient air quality standard.

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 Natural Heritage Program. 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 engine/generator or the industrial activity.

The Black Tern is a bird 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 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. Due to the minor increase in emissions, it is unlikely that the permit modification would cause any discernable harm to this species.

Additionally, operational conditions and limitations within MAQP #4070-01 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 permitting action would reduce the size of the engine/generator, therefore reducing the potential maximum diesel consumption. However, this permitting action would increase the operation time allowed in non-attainment areas. Therefore, there may be a slight increase in demand for water to run the water spray bars required for emissions control. Overall, the demands on water, air, and energy 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. Furthermore, this operation is a portable operation and therefore the Department cannot determine the status of any known sites in any new areas this operation may move to. 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 and because this operation would be expected to move to sites already containing pits.

J. Cumulative and Secondary Impacts

This permitting action has an overall reduction in emissions, with a very slight increase in winter season non-attainment area emissions. 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 expected to be minor.

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

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

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

A. Social Structures and Mores

The operation of the diesel engine and the increased production hours would be expected to cause little, if any, 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 be expected to have only intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4070-01 and Addendum 2. Thus, no native or traditional communities would be expected to be affected by the proposed project operations and little, if any, 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. Increased hours of operation associated with this permitting action may increase the proportion of gravel pit related activity in the area. The facility would be considered a portable/temporary source with operations that are expected to be seasonal and intermittent. Therefore, the cultural uniqueness and diversity of the area would be expected to experience minor impacts, if any.

C. Local and State Tax Base and Tax Revenue

The operation of a diesel engine/generator and the increased hours of production to an existing crushing and screening operation would be expected to have little, if any, impact on the local and state tax base and tax revenue. 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 current permitting action would increase the emissions of each pollutant by a very small amount. These extremely small emissions increases would not result in any discernable impact to vegetation cover, quantity, and quality in attainment areas in which this equipment is already operating. Overall, very minor, if any effects to agricultural production would be expected.

E. Human Health

MAQP #4070-01 and Addendum 2 would incorporate conditions to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Any impacts would be expected to be minor.

F. Access to and Quality of Recreational and Wilderness Activities

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

G. Quantity and Distribution of Employment

The application for this permitting action indicated that up to 11 employees may be employed at the site. This permitting action is not expected to require any significant change in the number of employees. Any change in the quantity and distribution of employment would be minor.

H. Distribution of Population

As described above, only minor, if any, changes in the quantity and distribution of employment would be expected with this permitting action. Therefore, any change in the distribution of population would be expected to be minor.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits for the proposed project, and to verify compliance with the permits that would be issued, however, as an already permitted source, no increase in these services would be required as a result of this permitting action. This permitting action would not be expected to result in any more than a minor increase in traffic on existing roadways. Therefore, the overall demand for government services would be expected to be minor.

J. Industrial and Commercial Activity

This permitting action would not be expected to result in any more than a minor increase in traffic on existing roadways. The facility would continue to be a small industrial source, and be portable and temporary in nature. 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, as well as in certain nonattainment areas. MAQP #4070-01 and Addendum 2 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Addendum 2 and MAQP #4070-01 would apply to the Schellinger facility while operating at any location in or within 10 km of certain PM<sub>10</sub> 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).

L. Cumulative and Secondary Impacts

Issuance of MAQP 4070-01 and Addendum 2 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 be expected to 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 be expected to 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 reduces the size of the diesel powered engine/generator size to allow for more hours of operation in nonattainment areas for the operation of a portable crushing operation. MAQP #4070-01 and Addendum 2 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Shawn Juers  
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