#### AIR QUALITY PERMIT

Issued To: Schellinger Construction Company, Inc. P

P.O. Box 39

Columbia Falls, MT 59912

Permit #4067-00

Complete Application Received: 4/10/07 Preliminary Determination Issued: 5/10/07 Department's Decision Issued: 6/12/07

Permit Final: 6/28/07 AFS #777-4067

An air quality permit, 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. Permitted Equipment:

Schellinger operates a portable concrete batch plant at various locations throughout Montana. A complete list of equipment is included in Section I.A. of the Permit Analysis.

#### B. Plant Location:

Schellinger operates a portable concrete batch plant initially located in the N½ of Section 21, Township 30 North, Range 21 West in Flathead County. Permit #4067-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

Addendum #1 and Permit #4067-00 apply to the Schellinger facility while operating at any location in or within 10 km of certain  $PM_{10}$  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), including the initial site location:  $N\frac{1}{2}$  of Section 21, Township 30 North, Range 21 West in Flathead County, Montana (4405 Whitefish Stage Road).

### Section II: Conditions and Limitations

#### A. Emission Control Requirements

- 1. Schellinger shall install, operate, and maintain the dust collection system located on the batch plant and cement silos, and all other emission control equipment, including a rubber boot load-out spout (or equivalent) as specified in Permit #4067-00 (ARM 17.8.752):
  - a. Schellinger shall install, operate, and maintain each baghouse and all associated dust collection systems and fittings, on every cement and cement supplement silo ventilation opening; and
  - b. Schellinger shall install, operate, and maintain the rubber boot load-out on every product load-out opening at the concrete plant.

- 2. Schellinger shall not cause or authorize to be discharged into the atmosphere from the plant:
  - a. Any vent emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
  - b. Any fugitive emissions from the source, or from any material transfer points, including but not limited to, truck loading or unloading, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
- 3. Schellinger shall not cause or authorize to be discharged into the atmosphere from any street, road or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes and must take reasonable precautions to control emissions of airborne particulate matter (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.2 (ARM 17.8.752).
- 5. Schellinger shall treat all unpaved portions of 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.3. (ARM 17.8.752).
- 6. Schellinger may operate a concrete batch plant with a maximum capacity of 150 cubic yards per hour (yd³/hr) (ARM 17.8.749).
- 7. Schellinger may operate one diesel generator and the maximum-rated design capacity shall not exceed 1,000 kilowatts (kW), and operation of the generator shall not exceed 2,920 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 8. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) must be installed and maintained on each baghouse and pressure drop must be measured in inches of water (ARM 17.8.749).
- 9. A warning device must be installed and maintained on each storage silo to avoid overfilling and possible filter damage (ARM 17.8.749).
- 10. 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 calculation used to establish production levels, shall be approved by the Department (ARM 17.8.749).

## B. Emissions Monitoring

1. Schellinger shall inspect each baghouse, associated vents and collection system, which are used for controlling emissions from the cement storage silos and the batch plant, at least every 6 months of operation, to ensure that each dust collection system is operating at the optimum efficiency. Records of inspections,

- repairs, and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).
- 2. Schellinger shall maintain on-site records of inspections, repairs, and maintenance. 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 measurement, shall be submitted to the Department upon request, and shall be available at the plant for inspection by the Department (ARM 17.8.748).

# C. Testing Requirements

- 1. Pressure drop across the control device and temperature must be recorded daily and kept on site according to Section II.B.2 (ARM 17.8.749).
- 2. All compliance source tests shall be conducted in accordance with Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

### D. Operational Reporting Requirements

- 1. If the plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and 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 upon request (ARM 17.8.765).
- 2. Schellinger shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop readings 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 five years following the date of the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 3. 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 is not limited to, all sources of emissions identified in Section I.A of 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 to verify compliance with permit limitations (ARM 17.8.505).
- 4. Schellinger shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a 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 or the addition of a new emission unit. This notice must be submitted to the Department, in writing, 10 days prior to start up 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).
- 5. Schellinger shall document, by month, the hours of operation for the diesel generator. By the 25<sup>th</sup> day of each month, Schellinger shall calculate the hours of operation of the diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. 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).

## E. Notification Requirements

Schellinger shall provide the Department with written notification of the actual start-up date of the new portable plant within 30 days after actual startup (ARM 17.8.749).

#### Section III: Addendum

Schellinger shall comply with all conditions in Addendum #1 to Permit #4067-00, 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 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 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, 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. Construction Commencement Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (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 having a Department approved permitting program.

### Permit Analysis Schellinger Construction Company, Inc. Permit #4067-00

# I. Introduction/Process Description

### A. Permitted Equipment

Schellinger Construction Company, Inc. (Schellinger) owns and operates a portable concrete batch plant consisting of the following equipment:

- Four aggregate bins;
- Two cement silos and associated baghouse(s);
- One cement supplement (flyash/slag) silo with associated baghouse;
- Concrete batch plant (maximum production rate up to 150 cubic yards per hour (yd³/hr);
- Diesel generator (up to 1,000 kilowatt (kW));
- Conveyors, batcher, hopper, and other associated equipment (Air emissions from the cement batcher are controlled by a dust collection system).

### B. Process Description

For a typical operation, aggregate is delivered to the site and stockpiled for use at the batch plant. The cement silos transfer cement, fly ash and/or slag into the batch plant along with the aggregate (sand and gravel) and water. The combined mixture is loaded into a truck where all materials are mixed together to form concrete. The concrete is transported and used at various construction operations.

#### 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 locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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. <u>ARM 17.8.110 Malfunctions</u>. (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 four hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation.
  (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
  - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
  - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 5. ARM 17.8.223 Ambient Air Quality Standard for PM<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. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and reasonable precaution be taken to control emissions of airborne particulate matter (PM). (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. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. 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). This facility is not an NSPS-affected facility under 40 CFR Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), because Schellinger does not crush or grind nonmetallic minerals.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Schellinger 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. <u>ARM 17.8.505 Air Quality Operation Fees.</u> 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. This 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. <u>ARM 17.8.740 Definitions</u>. 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 alteration to construct, alter, or use any concrete batch plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Schellinger has a PTE greater than 15 tons per year of PM, particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. 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 are not subject to 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, alteration or use of a source. A permit application was submitted 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 March 18, 2007, issue of *The Daily Inter Lake*, a newspaper of general circulation 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 Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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 altered 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 one 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).

- 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 one 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. <u>ARM 17.8.801 Definitions</u>. 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 since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (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.  $PTE > 70 \text{ tons/year of } PM_{10} \text{ in a serious } PM_{10} \text{ nonattainment area.}$
  - 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 #4067-00 for Schellinger, the following conclusions were

#### made:

- a. The facility's PTE is less than 100 tons/year for any criteria 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 not subject to current NSPS (40 CFR Part 60, Subpart OOO) standards.
- e. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Schellinger is not required to obtain a Title V operating permit because federally enforceable limitations have been included in Permit #4067-00 to limit the sources PTE below the major source threshold. Based on these facts, the Department has determined that Schellinger will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Schellinger will be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
  - i. In applying for an exemption under this section, the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

#### III. BACT Determination

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

#### A. Area Source 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 concrete batch plant. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the operation, and for emissions from the concrete batch plant. 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. Schellinger may, however, use chemical dust

suppressant to assist in controlling particulate emissions from the surrounding plant area.

Further, Schellinger shall not cause or authorize to be discharged into the atmosphere from any non-NSPS equipment, any visible emissions that exhibit an opacity of 20% 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, in order to maintain compliance with emission limitations in Section II of Permit #4067-00. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the operation.

#### B. Concrete Batch Plant

Schellinger proposed to control particulate emissions from the plant with filter cartridges and/or fabric filters on the cement silos and batch plant. All visible emissions from the plant including systems for handling, storing, and weighing aggregate; systems for loading, transferring, and storing cement are limited to 20% opacity. The Department determined that operating and maintaining the baghouse, all venting duct lines, fittings (including dust shroud) and associated blowers to achieve compliance with the corresponding limitations in Section II.A of the permit, and using water and chemical dust suppressant to comply with the reasonable precautions limitation will constitute BACT for the Schellinger plant.

#### C. Diesel Generator

Due to the limited hours of operation and the corresponding minimal emissions produced by the diesel generator and the lack of readily available, cost effective add-on controls; add-on controls would be cost prohibitive. Therefore, the Department determined proper operation and maintenance with no add-on controls would constitute BACT for the diesel generator.

Control options required for the proposed facility and diesel generators are similar to other recently permitted sources, and are capable of achieving the appropriate emission standards.

## IV. Emission Inventory

| Source*                                | Tons/year (TPY) |           |        |      |       |        |
|--|-----------------|-----------|--------|------|-------|--------|
|  | PM              | $PM_{10}$ | $NO_x$ | VOC  | CO    | $SO_x$ |
| Cement Batch Plant                     |                 |           |        |      |       |        |
| Haul Roads                             | 12.68           | 3.60      |        |      |       |        |
| Diesel Generator (up to 1000 kW)       | 4.31            | 4.31      | 60.69  | 4.84 | 13.08 | 4.01   |
| Aggregate delivery to ground storage   | 4.20            | 2.04      |        |      |       |        |
| Sand delivery to ground storage        | 0.99            | 0.46      |        |      |       |        |
| Aggregate transfer to conveyor         | 4.20            | 2.04      |        |      |       |        |
| Sand transfer to conveyor              | 0.99            | 0.46      |        |      |       |        |
| Aggregate transfer to elevated storage | 4.20            | 2.04      |        |      |       |        |
| Sand transfer to elevated storage      | 0.99            | 0.46      |        |      |       |        |
| Cement delivery to silo                | 0.13            | 0.07      |        |      |       |        |
| Cement supplement delivery to silo     | 0.20            | 0.13      |        |      |       |        |
| Weigh hopper loading                   | 5.19            | 2.50      |        |      |       |        |
| Truck Mix loading                      | 25.90           | 7.29      |        |      |       |        |
|  |                 |           |        |      |       |        |

Total 63.98 25.38 60.69 4.84 13.08 4.01

\*The maximum rated design capacity of the diesel generator is 1,000 kW and operation shall not exceed 2,920 hours during any 12-month time period.

**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)

PM= (winter time operation restricted to 33%) 34.75 Lbs/day wintertime

PM= (summertime operation unrestricted) 69.50 Lbs/day 69.5 lbs/day \*365 days/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)(0.5)

PM= (winter time operation restricted to 33%) 9.88 Lbs/day
PM= (summertime operation unrestricted) 19.75 Lbs/day
19.75 lbs/day \*365 days/yr \* 0.0005 tons/lb 3.60 tons/yr

Diesel Generator (up to 1000 kW)

Generator Size = 1000 kW 1kW = 1.3410 hp 1000kW \* 1.341 = 1341 hp Hours of Operation: 2920 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: 1341 hp \* 0.0022 lb/hp-hr \* 2920hr/yr \* 0.0005 tons/lb= 4.31 tons/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96) Calculations: 1341 hp \* 0.0022 lb/hp-hr \* 2920hr/yr \* 0.0005 tons/lb= 4.31 tons/yr

NO<sub>X</sub> Emissions:

Emission Factor: 0.0310 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: 1341 hp \* 0.031 lb/hp-hr \* 2920hr/yr \* 0.0005 tons/lb= 60.69 tons/yr

**VOC Emissions:** 

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: 1341 hp \* 0.00247 lb/hp-hr \* 2920hr/yr \* 0.0005 tons/lb= 4.84 tons/yr

CO Emissions:

 $\begin{array}{lll} Emission \ Factor: & 0.00668 \ lb/hp-hr & (AP-42, Table \ 3.3-1, \ 10/96) \\ Calculations: & 1341 \ hp * 0.00668 \ lb/hp-hr * 2920hr/yr * 0.0005 \ tons/lb= & 13.08 \ tons/yr \\ \end{array}$ 

SO<sub>X</sub> Emissions:

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: 1341 hp \* 0.00205 lb/hp-hr \* 2920hr/yr \* 0.0005 tons/lb= 4.01 tons/yr

Aggregate delivery to ground storage

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0064 lb/yd^3 (AP-42, Table 11.12-6, 6/06) Calculations: 0.0064 lb/yd^3 \* 150 yd^3/hr = 0.96 lb/hr

0.96 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 4.20 tons/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0031 lb/yd^3 (AP-42, Table 11.12-6, 6/06) Calculations: 0.0031 lb/yd^3 \* 150 yd^3/hr = 0.47 lb/hr

 $0.0031 \text{ lb/yd}^{-3} \times 150 \text{ yd}^{-5}/\text{ll} = 0.47 \text{ lb/ll}^{-1}$ 0.465 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 2.04 tons/yr Sand delivery to ground storage

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0015 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0015 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.23 \text{ lb/hr}$ 

0.225 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 0.99 tons/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0007 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0007 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.11 \text{ lb/hr}$ 

0.105 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.46 tons/yr

Aggregate transfer to conveyer

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0064 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0064 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.96 \text{ lb/hr}$ 

0.96 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 4.20 ton/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0031 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0031 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.47 \text{ lb/hr}$ 

0.465 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 2.04 tons/yr

Sand transfer to conveyor

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0015 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0015 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.23 \text{ lb/hr}$ 

0.225 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 0.99 tons/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0007 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0007 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.11 \text{ lb/hr}$ 

0.105 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.46 tons/yr

Aggregate transfer to elevated storage

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0064 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0064 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.96 \text{ lb/hr}$ 

0.96 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 4.20 tons/yr

PM<sub>10</sub> Emissions:

Emission Factor: 0.0031 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0031 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.47 \text{ lb/hr}$ 

0.465 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 2.04 tons/yr

Sand transfer to elevated storage

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0015 lb/yd^3 (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0015 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} = 0.23 \text{ lb/hr}$ 

0.225 lb/hr \*8760 hr/yr \* 0.0005 ton/lb = 0.99 tons/yr

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PM<sub>10</sub> Emissions:

0.0007 lb/yd^3 **Emission Factor:** (AP-42, Table 11.12-6, 6/06)

 $0.0007 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ Calculations: 0.11 lb/hr 0.105 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =0.46 tons/yr

Cement delivery to silo

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

**Emission Factor:** 0.0002 lb/yd^3 Cartridge Dust control (AP-42, Table 11.12-5, 6/06)

Calculations:  $0.0002 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 0.03 lb/hr

0.03 lb/hr \*8760 hr/yr \* 0.0005 ton/lb =0.13 tons/yr

PM<sub>10</sub> Emissions:

Cartridge Dust control (AP-42, Table 11.12-5, 6/06) **Emission Factor:** 0.0001 lb/yd^3

 $0.0001 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ Calculations: 0.02 lb/hr

0.015 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =0.07 tons/yr

**Cement Supplement delivery to silo** 

150 yd^3/hr Process Rate: Hours of operation: 8760 hr/yr

PM Emissions:

**Emission Factor:** 0.0003 lb/yd^3 Cartridge Dust control (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0003 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 0.05 lb/hr

0.045 lb/hr \*8760 hr/yr \* 0.0005 ton/lb =0.20 tons/yr

PM<sub>10</sub> Emissions:

Cartridge Dust control (AP-42, Table 11.12-6, 6/06) **Emission Factor:** 0.0002 lb/yd^3

Calculations:  $0.0002 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 0.03 lb/hr

0.03 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =0.13 tons/yr

Weigh hopper loading

Process Rate: 150 yd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

**Emission Factor:** 0.0079 lb/yd^3 Controlled (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0079 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 1.19 lb/hr

1.19 lb/hr \*8760 hr/yr \* 0.0005 ton/lb =5.19 ton/yr

PM<sub>10</sub> Emissions:

Controlled (AP-42, Table 11.12-6, 6/06) **Emission Factor:** 0.0038 lb/yd^3

 $0.0038 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 0.57 lb/hr Calculations:

0.57 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =2.50 tons/yr

Truck mix loading

Process Rate: 150 vd^3/hr Hours of operation: 8760 hr/yr

PM Emissions:

**Emission Factor:** 0.0392 lb/yd^3 Controlled (AP-42, Table 11.12-6, 6/06)

Calculations:  $0.0392 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 5.91 lb/hr

25.90 tons/yr 5.91 lb/hr \*8760 hr/yr \* 0.0005 ton/lb =

PM<sub>10</sub> Emissions:

**Emission Factor:** 0.0111 lb/yd^3 Controlled (AP-42, Table 11.12-6, 6/06)

Calculations:  $00.111 \text{ lb/yd}^3 * 150 \text{ yd}^3/\text{hr} =$ 1.67 lb/hr 1.67 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =7.29 tons/yr

V. **Existing Air Quality** 

> Permit #4067-00 is issued for the operation of a portable concrete batch plant at any location within Montana, excluding those areas that have a Department approved permitting program or

those areas considered tribal lands. Permit #4067-00 and Addendum #1 cover this portable plant while operating in those areas within Montana classified as being in attainment with federal ambient air quality standards, those areas not yet classified, and those area in or within  $10 \, \text{kilometers}$  (km) of certain  $PM_{10}$  nonattainment areas.

# VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area, and that would limit the facility's emissions below the Title V Operating Permit threshold. Based on the information provided, the Department believes that the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard. In addition, this facility is a portable source that will operate on an intermittent and temporary basis at a given location, so any impacts to air quality will be minor and short-lived.

## VII. Taking or Damaging Implication Analysis

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

#### VIII. Environmental Assessment

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

### Addendum #1 Schellinger Construction Company, Inc. Permit #4067-00

An addendum to air quality Permit #4067-00 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 will operate a portable concrete batch plant at various locations throughout Montana. This permit allows Schellinger to operate a concrete batch plant (up to 150 cubic yards/hour (yd³/hr)), conveyors, aggregate storage, silos for cement and cement supplement, weigh hopper, batcher and a 1,000 kilowatt (kW) diesel generator. Air emissions from the cement batcher and silos are controlled by a baghouse and associated dust collection system. A complete list of equipment is included in Section I.A. of the Permit Analysis.

Addendum #1 applies to Schellinger's portable concrete batch plant while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM $_{10}$ ) nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department of Environmental Quality (Department) during the winter months (October 1 – March 31), including the initial site location: N½ of Section 21, Township 30 North, Range 21 West in Flathead County, Montana.

### II. Seasonal and Site Restrictions

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 certain PM<sub>10</sub> nonattainment areas where Schellinger may operate:
  - N½ of Section 21, Township 30 North, Range 21 West; and
  - Any other site that may be approved, in writing, by the 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 #1 to Permit #4067-00. Addendum #1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

#### III. Limitations and Conditions

- A. Operational Limitations and Conditions Winter Season (October 1 March 31)
  - 1. All visible emissions from the plant shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

- 2. All visible emissions from any equipment, such as transfer points, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749 and 40 CFR 60, Subpart OOO).
- 3. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 4. Schellinger shall not cause or authorize to be discharged into the atmosphere from any street, road or parking lot any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
- 5. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section III.A.4 (ARM 17.8.749).
- 6. Concrete plant production is limited to 1,800 cubic yards during any rolling 24-hour time period (ARM 17.8.749).
- 7. Schellinger shall not operate more than one diesel generator at any give time and the maximum rated design capacity shall be 1,000 kW or less. Operation of the generator shall not exceed 2,920 hours during any 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 8. 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 (ARM 17.8.749).
- B. Operational Limitations and Conditions Summer Season (April 1 September 30)
  - 1. All visible emissions from the plant shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
  - 2. All visible emissions from any equipment, such as transfer points, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749 and 40 CFR 60, Subpart OOO).
  - 3. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
  - 4. Schellinger shall not cause or authorize to be discharged into the atmosphere from any street, road or parking lot any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
  - 5. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section III.B.4 (ARM 17.8.749).
  - 6. Schellinger shall not operate more than one diesel generator at any give time and the maximum rated design capacity shall be 1,000 kW or less. Operation of the generator shall not exceed 2,920 hours during any 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

7. 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 (ARM 17.8.749).

## C. Operational Reporting Requirements

- 1. Schellinger shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
- 2. Schellinger shall provide the Department with written notice of relocation of the permitted equipment within 15 working days before the physical transfer of the equipment (ARM 17.8.765).
- 3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emission inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):
  - a. Tons of bulk material loaded at each site;
  - b. Daily hours of operation at each site;
  - c. Gallons of diesel fuel used for the generators/engines at each site;
  - d. Fugitive dust information consisting of a listing of all plant vehicles including the following for each vehicle type:
    - i. Number of vehicles
    - ii. Vehicle type
    - iii. Vehicle weight, loaded
    - iv. Vehicle weight, unloaded
    - v. Number of tires on vehicle
    - vi. Average trip length
    - vii. Number of trips per day per vehicle
    - viii. Average vehicle speed
    - ix. Area of activity
    - x. Vehicle fuel usage (gasoline or diesel) annual total
  - e. Fugitive dust control for haul roads and general plant area:
    - i. Hours of operation of water trucks
    - ii. Application schedule for chemical dust suppressant, if applicable
- 4. Schellinger shall document, by day, the total concrete plant production during the winter season. Schellinger shall sum the total concrete plant production during the previous 24-hours to verify compliance with the limitation 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).

5. Schellinger shall document, by month, the hours of operation of for the diesel generator. By the 25<sup>th</sup> day of each month, Schellinger shall calculate the hours of operation of the diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.A.7 and III.B.6. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

### Addendum #1 Analysis Schellinger Construction Company, Inc. Permit #4067-00

### I. Permitted Equipment

Schellinger Construction Company, Inc. (Schellinger) will operate a portable concrete batch plant at various locations throughout Montana. This permit allows Schellinger to operate a concrete batch plant (up to 150 cubic yards/hour (yd³/hr)), conveyors, hopper, storage silos, batcher and a 1,000 kilowatt (kW) diesel generator. A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

Addendum #1 and Permit #4067-00 apply to the Schellinger concrete batch plant while operating at any location in or within 10 km of  $PM_{10}$  nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department of Environmental Quality (Department) during the winter months (October 1 – March 31), including the initial site location: N½ of Section 21, Township 30 North, Range 21 West in Flathead County, Montana.

### II. Source Description

For a typical operation, aggregate is delivered to the site and stockpiled for use at the batch plant. The cement silos transfer cement, fly ash and/or slag into the batch plant along with the aggregate (sand and gravel) and water. The combination of sand, gravel, cement, and water are then loaded into a truck where all materials are mixed together to form concrete. The concrete is transported and used at various construction operations.

## III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. 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. <u>ARM 17.8.749 Conditions for Issuance of Permit</u>. 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. <u>ARM 17.8.764 Modification of Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. An air quality permit may be transferred from one location to another if:

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

Schellinger must submit proof of compliance with the transfer and public notice requirements when Schellinger transfers to any of the locations covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and limitations in Addendum #1 to Permit #4067-00 will prevent Schellinger from having a significant impact on  $PM_{10}$  nonattainment areas.

# IV. Emission Inventory

| Source*                                | Lbs/day |           |        |       |       |        |  |
|--|---------|-----------|--------|-------|-------|--------|--|
|  | PM      | $PM_{10}$ | $NO_x$ | VOC   | CO    | $SO_x$ |  |
| <b>Cement Batch Plant</b>              |         |           |        |       |       |        |  |
| Haul Roads                             | 34.75   | 9.88      |        |       |       |        |  |
| Diesel Generator (up to 1000 kW)       | 23.60   | 23.60     | 332.57 | 26.50 | 71.66 | 21.99  |  |
| Aggregate delivery to ground storage   | 11.52   | 5.58      |        |       |       |        |  |
| Sand delivery to ground storage        | 2.70    | 1.26      |        |       |       |        |  |
| Aggregate transfer to conveyor         | 11.52   | 5.58      |        |       |       |        |  |
| Sand transfer to conveyor              | 2.70    | 1.26      |        |       |       |        |  |
| Aggregate transfer to elevated storage | 11.52   | 5.58      |        |       |       |        |  |
| Sand transfer to elevated storage      | 2.70    | 1.26      |        |       |       |        |  |
| Cement delivery to silo                | 0.36    | 0.18      |        |       |       |        |  |
| Cement supplement delivery to silo     | 0.54    | 0.36      |        |       |       |        |  |
| Weigh hopper loading                   | 14.22   | 6.84      |        |       |       |        |  |
| Truck Mix loading                      | 70.96   | 19.98     |        |       |       |        |  |
| Total                                  | 187.09  | 81.36     | 332.57 | 26.50 | 71.66 | 21.99  |  |

<sup>\*</sup>A wintertime operational limitation was placed on the generator to ensure that the peak 24-hour  $PM_{10}$  impact from the generator was less than 5  $ug/m^3$ . The generator shall not operate more than 8 hours per 24-hour rolling time period, and concrete plant operation is limited to 12 hours per 24-hour rolling time period.

### V. Air Quality Impacts

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

Addendum #1 to Permit #4067-00 is for a portable concrete batch plant located at sites in or within 10 km of certain  $PM_{10}$  nonattainment areas during the winter season (October 1 through March 31). Winter season operations many include only the locations listed in Section II.A of Addendum #1. Addendum #1 of Permit #4067-00 would also allow for summertime operations (April 1 – September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish  $PM_{10}$  nonattainment areas.

# VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, Montana Code Annotated (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 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

### FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Schellinger Construction Company, Inc.

Air Quality Permit Number: #4067-00

Preliminary Determination Issued: May 10, 2007 Department Decision Issued: June 12, 2007

Permit Final: June 28, 2007

1. Legal Description of Site: Schellinger would operate a portable concrete batch plant initially located in the N½ of Section 21, Township 30 North, Range 21 West in Flathead County. However, Permit #4067-00 would apply 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 PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.

Addendum #1 and Permit #4067-00 would apply to Schellinger facility while operating at any location in or within 10 km of certain  $PM_{10}$  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), including the initial site location,  $N\frac{1}{2}$  Section 21, Township 30 North, Range 21 West in Flathead County, Montana.

- 2. Description of Project: For a typical operation, aggregate is delivered to the site and stockpiled for use at the batch plant. The cement silos transfer cement, fly ash and/or slag into the batch plant along with the aggregate (sand and gravel) and water. The combined mixture is loaded into a truck where all materials are mixed together to form concrete. The concrete is transported and used at various construction operations.
- 3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company by the sale and use of concrete. The issuance of Permit #4067-00 would allow Schellinger to operate the permitted equipment at various locations throughout Montana.
- 4. Additional Project Site Information: Although this permit is designated as portable, the initial site location would be the N½ of Section 21, Township 30 North, Range 21 West in Flathead County. Given the size and the nature of this project, it is likely that this project would also require a permit through the Industrial and Energy Minerals Bureau (IEMB) prior to construction. In this case, an extensive environmental assessment would be completed and would be located in the Mined Land Reclamation Permit for this specific site.
- 5. Alternatives Considered: In addition to the proposed action, the Department 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 demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

- 6. A Listing of Mitigation, Stipulations, and Other Controls: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #4067-00.
- 7. Regulatory Effects on Private Property Rights: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
- 8. 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<br>Included |
|----|--|-------|----------|-------|------|---------|----------------------|
| A. | Terrestrial and Aquatic Life and Habitats                      |       |          | X     |      |         | yes                  |
| В. | Water Quality, Quantity, and Distribution                      |       |          | X     |      |         | yes                  |
| C. | Geology and Soil Quality, Stability, and<br>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 Resource  |       |          | X     |      |         | yes                  |
| H. | Demands on Environmental Resource of<br>Water, Air, and Energy |       |          | X     |      |         | yes                  |
| Ι  | 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

There is a possibility that terrestrials would use the same area as the concrete batch plant. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the plant operation would be considered a minor source of emissions, and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (see Section 8.F of this EA). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from this operation.

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

Water would be required for dust suppression on the surrounding roadways and at areas of operation for equipment pollution control. However, pollution control for portions of the plant could be accomplished using a small volume of water and therefore, only minor amounts of pollutant deposition would occur. Any pollutant deposition in the area would be seasonal and intermittent given the portable nature of the batch plant. There are no known surface water sources that would be impacted as a result of this project. Therefore, only minor surface and groundwater quality impacts would be expected.

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

The proposed project 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 water would be required for pollution control, and only minor amounts of pollution would be generated. Pollutants would be widely dispersed before settling upon vegetation and surrounding soils (see Section 8.D of this EA). Therefore, any effects upon geology and soil quality, stability, and moisture at this proposed operational site would be minor and short-term.

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

The Department contacted Montana Natural Heritage Program (MNHP) in an effort to determine if there are any species of concern in or near this area. MNHP noted the following vascular plants are located in or within one mile of the site: Latah Tule Pea, Spalding's Campion, Small Yellow Lady's-Slipper, Maidenhair Spleenwort, Red-Root Flatsedge, Slender Cottongrass, Short-styled Thistle, and Deer Indian Paintbrush. In addition, the Last Best Place Damselfly is an invertebrate animal found in or within one mile of the initial site location.

Although many of the species of concern would potentially be located near the facility, the concrete batch plant would be considered a minor source of emissions by industrial standards, and would typically operate in areas previously designated and used for this type of operation. The batch plant would be portable in nature and pollutants from the source would be widely dispersed. Therefore, minor impacts to vegetative cover, quantity and quality would occur as a result of this project.

### E. Aesthetics

The concrete batch plant's operation would be visible, and would create additional noise. According to the applicant, the nearest house is located approximately 100 feet away, but the batch plant would initially operate at an existing gravel pit. Permit #4067-00 would include conditions to control emissions, including visible emissions from the plant. Since the plant would be portable, and would operate on an intermittent and seasonal basis, any visual aesthetic impacts would be minor and short-lived.

## F. Air Quality

Air quality impacts from the proposed project would be minor because this facility would operate on an intermittent and temporary basis. In addition, Permit #4067-00 would include conditions limiting the facility's opacity and the facility's operation. Water would be required on-site at all times to control emissions. The permit would also limit total emissions from the plant and any additional Schellinger equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the concrete batch plant would be a minor source of

emissions as defined under the Title V Operating Permit Program because the source's PTE was limited below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the facility would be minimal because pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition on the surrounding area (due to site topography of the area and minimal vegetative cover in the area). Therefore, air quality impacts from operating the concrete batch plant in this area 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 MNHP. Search results concluded the Bull Trout and Canada Lynx are both considered threatened and are located near the initial site location. According to the applicant, no fish habitats are located within the project site and therefore the Bull Trout would not be directly impacted as a result of this facility. The Canada Lynx habitat includes a large geographical area, including the Rocky Mountains of northwestern Montana and Idaho. The Lynx prefer the boreal forest landscape and coarse woody debris, such as downed logs, so it is unlikely that the Lynx would locate in this area where gravel pit operations already exist. Because the species of concern are not likely to be located near the project site, and the fact that the project is portable in nature and would be considered a minor source of emissions, impacts to unique endangered, fragile of limited environmental resources would be minor.

## H. Demands on Environmental Resources of Water, Air, and Energy

Only small quantities of water would be required for dust suppression of emissions being generated at the site. Impacts to air resources would be minimal because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations. Because air pollutants generated by the facility would be widely dispersed (see Section 8.F of this EA) and energy requirements would be provided by land power or a diesel generator (in the event of a power outage), any impacts to water, air, and energy resources would be minor.

### I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operation. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to the area.

### J. Cumulative and Secondary Impacts

The concrete batch plant would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of PM, PM<sub>10</sub>, NO<sub>x</sub>, VOC, CO, and SO<sub>x</sub> emissions generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operation because it would be seasonal and temporary in nature. Additionally, this facility, in combination with other emissions from equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

9. 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<br>Included |
|----|---|-------|----------|-------|------|---------|----------------------|
| A. | Social Structures and Mores                                     |       |          |       | X    |         | yes                  |
| В. | 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 concrete batch plant would cause no disruption to the social structures and mores in the area because the source would be considered a minor industrial source of emissions, and would have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions placed in Permit #4067-00, which would limit the effects to social structures and mores.

### B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the concrete batch plant because the facility would be a portable source, with seasonal and intermittent operations. The predominant use of the surrounding area (existing operational pit) would not change as a result of this concrete batch plant. Therefore, the cultural uniqueness and diversity of the area would not be affected.

#### C. Local and State Tax Base and Tax Revenue

The concrete batch plant would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions, and would have seasonal and intermittent operations. Only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. According to the applicant approximately 2-3 people would be employed as a result of this concrete batch plant with an additional 10-15 truck drivers based at the site. Because the facility is portable and temporary it is unlikely that people would move to the area. Impacts to local tax base and revenue would be minor

and short-term because the source would be portable and the money generated for taxes would be widespread.

## D. Agricultural or Industrial Production

The initial site for the batch plant would be located on an existing operational gravel pit and according to the applicant the total property available would be 40 acres. The concrete batch plant operation would have only a minor impact on local industrial production since the facility would be considered a minor source of concrete production and air emissions. 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 would occur. In addition, the facility operations 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 impacts to agricultural or industrial production would be minor.

### E. Human Health

Permit #4067-00 would incorporate conditions to ensure that the concrete batch plant operation 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 Permit #4067-00. 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 concrete batch plant operation.

## F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited by this facility. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, hours of operation, and rural location. The facility would operate on a seasonal and intermittent basis on private land and would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be minor.

## G. Quantity and Distribution of Employment

According to the applicant, the plant operation would require approximately 2-3 employees. However, there would be approximately 10-15 other transient employees (i.e. truck drivers for aggregate, cement, load out, etc.), but still essential to the concrete batch plant. Only a few individuals would be expected to permanently relocate as a result of operating the concrete batch plant. Therefore, minor effects upon the quantity and distribution of employment in this area would be expected.

### H. Distribution of Population

The concrete batch plant is a portable industrial facility that would require few employees to operate. Few individuals, if any, would be expected to permanently relocate to this area. Therefore, the concrete batch plant would only minimally impact the normal population distribution in the initial area of operation or any future operating site.

### I. Demands of Government Services

This project would result in an increase in traffic on existing roadways while the concrete batch plant is in progress. 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 concrete batch plant would represent only a minor increase in the industrial activity in the proposed area of operation because this source is a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

### K. Locally Adopted Environmental Plans and Goals

Permit #4067-00 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility would have intermittent and seasonal operations any impacts from the facility would be minor and short-lived.

### L. Cumulative and Secondary Impacts

The concrete batch plant 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, few industrial operations, if any, would be expected to result from permitting this facility. Any minor increase in traffic would have little effect on local traffic in the immediate area. Because the source would be relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Schellinger, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative and secondary effects would result.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor and temporary; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Montana Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Jenny O'Mara

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