AIR QUALITY PERMIT

Issued To: Schellinger Sand and Gravel, Inc

P.O. Box 39

Columbia Falls, MT 59912

Permit #3304-02

Administrative Amendment (AA)
Request Received: 12/19/07

Department Decision on AA Issued: 4/15/08

Permit Final: 5/01/08

AFS #777-3304

An air quality permit, with conditions, is hereby granted to Schellinger Sand and Gravel, Inc. (Schellinger), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Schellinger operates a portable crushing and screening facility and associated wash plant that initially located at the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. However, Permit #3304-02 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas, or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*

Permit #3304-02 and Addendum #3 allow Schellinger to locate in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On December 19, 2007, the Department received a request to transfer Permit #3304-01 and Addendum #2 from Carlson Sand and Gravel, LLC to Schellinger. Permit #3304-02 and Addendum #3 replace Permit #3304-01 and Addendum #2. Permit #3304-02 and Addendum #3 were updated to reflect the current permit language and rule references used by the Department. In addition, a few de minimis changes were made to the permit including: removal of one generator/engine (82 kilowatts (kW)), and an increase in screening production.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

- 1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS)-affected crusher shall not exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 2. All visible emissions from any other NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an

- opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Water and water 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 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 17.8.308 and ARM 17.8.749).
- 6. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, or 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. Crushing production is limited to 2,628,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 8. Schellinger shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 300 tons per hour (TPH) (ARM 17.8.749).
- 9. Screening production is limited to 7,446,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 10. Schellinger shall not operate more than two screens at any given time and the cumulative maximum rated design capacity of the two screens shall not exceed 850 TPH (ARM 17.8.749).
- 11. Schellinger shall not operate more than one diesel generator/engine at any given time and the maximum rated design capacity shall not exceed 250 kW (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Schellinger, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 13. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 14. Schellinger shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, for any applicable combustion engine (ARM 17.8.340, 40 CFR 60, Subpart IIII).

B. Testing Requirements

- 1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, 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 any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR 60, General Provisions and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing and screening facility 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 maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Schellinger as a permanent business record for at least 5 years following the date of the measurement, 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).
- 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 the most recent emission inventory report and sources 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 units as 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).
- 4. Schellinger shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the *addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

- 5. Schellinger shall document, by month, the crushing production from the facility. By the 25th 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.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 document, by month, the screening production from the facility. By the 25th day of each month, Schellinger shall calculate the screening production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

Section III: General Conditions

- A. Inspection Schellinger shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Schellinger fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided 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 Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay of 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 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- 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 at any location in Montana, except within those areas having a Department-approved permitting program.

Permit Analysis Schellinger Sand and Gravel, Inc. Permit #3304-02

I. Introduction/Process Description

A. Permitted Equipment

Schellinger Sand and Gravel, Inc. (Schellinger) owns and operates a portable crushing and screening facility that consists of a crusher (up to 300 tons per hour (TPH)), diesel generator/engine (up to 250 kilowatts (kW)), screen (up to 500 TPH), wash plant screen (up to 350 TPH), and associated equipment.

B. Source Description

Schellinger proposes to use this crushing and screening plant to crush sand and gravel for use in various construction operations. For a typical operational setup, materials are loaded into a hopper and crushed, conveyed to the screen where materials are separated by size. Once material is screened it is either conveyed to stockpile, conveyed back to the crusher, or sent to wash plant for further processing. Finally, material is separated by size and sent to stockpile for sale or use at various construction projects.

C. Permit History

On February 5, 2004, Carlson Sand & Gravel, LLC (Carlson) submitted a complete permit application to operate a portable crushing and screening facility consisting of a portable 2003 matrix cone crusher (up to 300 tons per hour (TPH)) with an attached diesel generator/engine (up to 335 horsepower (HP)), a 2003 (6'x12') Chieftain screen (up to 500 TPH) with an attached diesel generator/engine (up to 109 HP), a 1995 (5'x15') Fabtec wash plant screen (up to 250 TPH), and associated equipment. The original location for the facility was the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. **Addendum #1** was established in **Permit #3304-00**, to allow Carlson to locate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas during the summer months (April 1 – September 30). Permit #3304-00 and Addendum #1 were final on April 17, 2004.

On September 2, 2005, the Department of Environmental Quality (Department) received a request from Carlson for an administrative amendment to Permit #3304-00 and to update Addendum #1 to allow for wintertime operations (October 1-March 31) in the Kalispell PM_{10} nonattainment area, at Section 21, Township 30 North, Range 21 West, in Flathead County.

Subsequently, on September 28, 2005, the Department sent an incomplete letter to Carlson to request additional information, which was submitted on October 3, 2005. SCREEN3 modeling was applied to allow for wintertime operations. Permit #3304-01 and Addendum #2 were also written in a de minimis friendly manner, allowing Carlson additional flexibility in facility operations while limiting facility emissions. **Permit** #3304-01 replaced Permit #3304-00 and **Addendum** #2 replaced Addendum #1.

D. Current Permit Action

On December 19, 2007, the Department received a request to transfer Permit #3304-01 and Addendum #2 from Carlson to Schellinger. **Permit #3304-02** and **Addendum #3** replace Permit #3304-01 and Addendum #2. Permit #3304-02 and Addendum #2 were updated to reflect the current permit language and rule references used by the Department. In addition, a few de minimis changes were made to the permit including: removal of one generator/engine (82 kW), and an increase in screening production.

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 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 is a list of applicable definitions used in this subchapter, 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 all 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 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 which, without resulting in reduction in 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 PM₁₀

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

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <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.
 - ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and reasonable precautions 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 Processes</u>. This rule requires that no person shall cause or allow 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. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (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 Standards of Performance for New Stationary Sources. This rule

incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

<u>40 CFR 60, Subpart OOO</u> - This rule applies to crushing facilities with capacities greater than 150 TPH and that were constructed after August 31, 1983. Because Schellinger proposes to operate a crusher with a capacity in excess of 150 TPH that was constructed after August 31, 1983 in conjunction with this permit, NSPS requirements will apply to the facility.

40 CFR 60, Subpart IIII: Subpart IIII, Stationary Compression Ignition Internal Combustion Engines, would apply for any applicable diesel generator manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005.

- 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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 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. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year (TPY) of any pollutant. Schellinger has a PTE greater than 15 TPY of total PM, PM₁₀, and oxides of nitrogen (NO_x); therefore, an air quality permit is required.
 - 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule

- identifies the activities that are not subject to the Montana Air Quality Permit Program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>

 <u>Changes</u>. 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. However, a permit application
 was not required for the current permit action because the permit change is
 considered an administrative permit change. (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. An
 affidavit of publication of public notice was not required for the current permit
 action because the permit change is considered an administrative permit change.
- 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <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. 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 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 1 year after the permit is issued.

- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of Schellinger, 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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - ARM 17.8.818 Review of Major Stationary Sources and Major Modifications— Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- 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 #3304-02 for the Schellinger facility, 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 ton/year of all HAPs.
 - c. This source is not located in a serious PM_{10} nonattainment area.
 - d. This facility is not subject to any current NESHAP standards.
 - e. The facility is currently subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that this facility would be a minor source of emissions, as defined under the Title V Operating Permit Program. 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.

III. BACT Analysis

A BACT determination is required for any new or altered source. Schellinger shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used. A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

Source	TPY					
	PM	PM_{10}	NO _x	VOC	CO	SO _x
Crusher (up to 300 TPH)	1.58	0.71				
Screen (up to 500 TPH)	8.19	2.76				
Wash plant /screen (up to 350 TPH)	3.37	1.13				
Truck Unloading	0.42	0.04				
Material Transfer	2.12	0.70				
Pile Forming	19.34	9.07				
Diesel Engine (up to 250 kW)	3.23	3.23	45.52	3.63	9.81	3.01
Haul Roads	12.68	3.60				
Total	50.93	21.23	45.52	3.63	9.81	3.01

A complete emission inventory for Permit #3304-02 is on file with the Department.

V. Existing Air Quality

Permit #3304-02 and Addendum #3 would cover this portable crushing and screening facility while operating in or within 10 km of a PM_{10} nonattainment area during the winter months (October 1 through March 31), including the initial site location (the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana). Permit #3304-02 would also cover this facility while operating in areas classified as attainment or unclassified for ambient air quality standards.

VI. Air Quality Impacts

Based on the information provided and the conditions established in Permit #3304-02, the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard established for any of Montana's attainment or unclassified ambient air quality areas. Additionally, the limitations and conditions established in Addendum #3 would further reduce the facility emissions generated while operating in the nonattainment areas and would also be protective of corresponding ambient air quality standards. Also, the source is portable and any air quality impacts will be minimal.

VII. Ambient Air Impact Analysis

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

VII. Taking or Damaging Implication Analysis

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore Taking or Damaging Implication Analysis is not required.

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Addendum #3 Schellinger Sand and Gravel, Inc. Permit #3304-02

An addendum to Montana Air Quality Permit #3304-02 is hereby granted to Schellinger Sand and Gravel, Inc. (Schellinger) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment:

Schellinger Sand and Gravel, Inc. (Schellinger) owns and operates a portable crushing and screening facility that consists of a crusher (up to 300 tons per hour (TPH)), diesel generator/engine (up to 250 kilowatts (kW)), screen (up to 500 TPH), wash plant/screen (up to 350 TPH), and associated equipment.

II. Seasonal and Site Restrictions

Addendum #3 applies to the Schellinger facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) The only location in or within 10 km of a PM_{10} nonattainment area where Schellinger may operate is:
 - 1. Section 21, Township 30 North, Range 21 West, in Flathead County, Montana; and
 - 2. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) Schellinger may operate at any location, including in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM_{10} nonattainment areas.
- C. Schellinger shall comply with the limitations and conditions contained in Addendum #3 to Permit #3304-02 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum #3 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #3 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
 - 1. Water spray bars must be available and operated, as necessary on the crushers, screens, and all transfer points whenever the crushing and screening 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 screens or transfer points, any visible 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 (ARM 17.8.749).
- 4. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 5. Crushing production shall not exceed 5,100 tons per day (ARM 17.8.749).
- 6. The wash plant screen production shall be limited to 5,950 tons per day (ARM 17.8.749).
- 7. The non-wash plant screen shall be limited to 8,500 tons per day (ARM 17.8.749).

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

- 1. Water spray bars must be available and operated, as necessary on the crushers, screens, and all transfer points whenever the crushing and screening 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 screens or transfer points, any visible 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 (ARM 17.8.749).
- 4. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 5. Crushing production shall not exceed 7,200 tons per day (ARM 17.8.749).
- 6. The wash plant screen production shall be limited to 8,400 tons per day (ARM 17.8.749).
- 7. The non-wash plant screen shall be limited to 12,000 tons per day (ARM 17.8.749).

C. Operational Reporting Requirements

1. If this crushing and screening facility 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 each crusher at each site (including amount of recirculated/rerun material),
 - b. Tons of material screened by each screen at each site (including amount of recirculated/rerun material),
 - c. Tons of bulk material loaded at each site (production),
 - d. Daily hours of operation at each site,
 - e. Gallons of diesel used by each generator at each site,
 - f. Hours of operation and size of generator at each site,
 - g. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles.
- 3. Schellinger shall document, by day, the total crushing production. Schellinger shall sum the total crushing production during the previous day to verify compliance with the limitations in Section III.A.5 and 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 and may be submitted along with the annual emissions inventory (ARM 17.8.752).
- 4. Schellinger shall document, by day, the total screening production from the wash plant screen and non-wash plant screen. Schellinger shall sum the total screening production during the previous day to verify compliance with the limitation in Section III.A.6 and III.A.7 and Section III.B.6 and III.B.7. 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 and may be submitted along with the annual emissions inventory (ARM 17.8.752).

Addendum #3 Analysis Schellinger Sand and Gravel, Inc. Permit #3304-02

I. Introduction/Process Description

A. Permitted Equipment

Schellinger Sand and Gravel, Inc. (Schellinger) owns and operates a portable crushing and screening facility that consists of a crusher (up to 300 tons per hour (TPH)), diesel generator/engine (up to 250 kilowatts (kW)), screen (up to 500 TPH), wash plant screen (up to 350 TPH), and associated equipment.

B. Source Description

Schellinger proposes to use this crushing and screening plant to crush sand and gravel for use in various construction operations. For a typical operational setup, materials are loaded into a hopper and crushed, conveyed to the screen where materials are separated by size. Once material is screened it is either conveyed to stockpile, conveyed back to the crusher, or sent to wash plant for further processing. Finally, material is separated by size and sent to stockpile for sale or use at various construction projects.

D. Permit History

On February 5, 2004, Carlson Sand & Gravel, LLC (Carlson) submitted a complete permit application to operate a portable crushing and screening facility consisting of a portable 2003 matrix cone crusher (up to 300 TPH) with an attached diesel generator/engine (up to 335 horsepower (HP)), a 2003 (6'x12') Chieftain screen (up to 500 TPH) with an attached diesel generator/engine (up to 109 HP), a 1995 (5'x15') Fabtec wash plant screen (up to 250 TPH), and associated equipment. The original location for the facility was the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. **Addendum #1** was established in **Permit #3304-00**, to allow Carlson to locate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas during the summer months (April 1 – September 30). Permit #3304-00 and Addendum #1 were final on April 17, 2004.

On September 2, 2005, the Department of Environmental Quality (Department) received a request from Carlson for an administrative amendment to Permit #3304-00 and to update Addendum #1 to allow for wintertime operations (October 1-March 31) in the Kalispell PM₁₀ nonattainment area, at Section 21, Township 30 North, Range 21 West, in Flathead County.

Subsequently, on September 28, 2005, the Department sent an incomplete letter to Carlson to request additional information, which was submitted on October 3, 2005. SCREEN3 modeling was applied to allow for wintertime operations. Permit #3304-01 and Addendum #2 were also written in a de minimis friendly manner, allowing Carlson additional flexibility in facility operations while limiting facility emissions. **Permit #3304-01** replaced Permit #3304-00 and **Addendum #2** replaced Addendum #1.

E. Current Permit Action

On December 19, 2007, the Department received a request to transfer Permit #3304-01 and Addendum #2 from Carlson to Schellinger. **Permit #3304-02** and **Addendum #3** replace Permit #3304-01 and Addendum #2. Permit #3304-02 and Addendum #2 were updated to

reflect the current permit language and rule references used by the Department. In addition, a few de minimis changes were made to the permit including: removal of one generator/engine (82 kW), and an increase in screening production.

II. 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 permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. ARM 17.8.764 Administrative Amendment to Permit. An 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. 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.

IV. Emission Inventory

Summer Season							
Source	Pounds/day (lbs/day)						
	PM	PM_{10}	NO_x	VOC	CO	SO _x	
Crusher (up to 300 TPH)	8.66	3.89					
Screen (up to 500 TPH)	26.41	8.88					
Wash plant /screen (up to 350 TPH)	18.47	6.19					
Truck Unloading	2.30	0.22					
Material Transfer	11.62	3.84					
Pile Forming	105.97	49.70					
Diesel Engine (up to 250 kW)	17.70	17.70	249.42	19.89	53.75	16.49	
Haul Roads	69.48	19.73					
Total	260.60	110.14	249.42	19.89	53.75	16.49	

Winter Season							
Source	(lbs/day)						
	PM	PM_{10}	NO _x	VOC	CO	SO _x	
Crusher (up to 300 TPH)	6.12	2.75					
Screen (up to 500 TPH)	18.70	6.29					
Wash plant /screen (up to 350 TPH)	13.09	4.40					
Truck Unloading	1.62	0.16					
Material Transfer	8.21	2.70					
Pile Forming	75.07	35.19					
Diesel Engine (up to 250 kW)	12.54	12.54	176.68	14.08	52.13	11.68	
Haul Roads							
Total	184.58	78.02	176.68	14.08	52.13	11.68	

^{*}The operation is limited to 17 hours/day during any rolling 24-hour time period. A complete emission inventory is on file with the Department.

V. Existing Air Quality

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

Permit #3304-02 and Addendum #3 cover the portable crushing and screening facility when located at sites in or within 10 km of certain PM_{10} nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects on air quality will be minor and short-lived.

VI. Air Quality Impacts

Permit #3304-02 and Addendum #3 cover the operation of this portable crushing and screening facility while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum #3 covers the operations of this portable crushing and screening facility while operating in the North $\frac{1}{2}$ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana, or any other location approved by the Department in writing which is in or within 10 km of the Kalispell PM₁₀ nonattainment areas during the winter months (October 1 through March 31). Additionally, the facility will also be allowed to operate in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1 through September 30).

VII. Taking or Damaging Implication Analysis

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

VIII. Environmental Assessment

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

Analysis Prepared by: Jenny O'Mara

Date: March 31, 2008