Steve Bullock, Governor Tracy Stone-Manning, Director

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December 9, 2013

Don Schwend Gravel 378 Carbonado Road Joliet, MT 59041

Dear Mr. Schwend:

Montana Air Quality Permit #4072-02 is deemed final as of December 7, 2013, by the Department of Environmental Quality (Department). This permit is for a portable crushing and screening facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel

Air Permitting Supervisor

Air Resources Management Bureau

Julis A Merkl

(406) 444-3626

ЈМ:СН

Enclosure

Craig Henrikson

Environmental Engineer
Air Resources Management Bureau

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Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #4072-02

Don Schwend Gravel 378 Carbonado Road Joliet, MT 59041

December 9, 2013



MONTANA AIR QUALITY PERMIT

Issued To: Don Schwend Gravel MAQP: #4072-02

378 Carbonado Road Administrative Amendment (AA)
Joliet, MT 59041 Request Received: 11/12/13

Department's Decision on AA: 11/21/13

Permit Final: 12/7/13 AFS #777-4072

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Don Schwend Gravel. (Schwend), 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

MAQP #4072-02 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of nonattainment areas for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). A Missoula County air quality permit will be required for locations within Missoula County, Montana. Schwend will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of any PM₁₀ nonattainment area.

Schwend's initial operating site is in the SE¼ of the SE¼ of Section 30, Township 4 South, Range 22 East, in Carbon County, Montana, near the town of Joliet.

B. Current Permit Action

On November 12, 2013, the Department received a request from Schwend Gravel Co. that MAQP #4072-01 be amended to change the name of the company to Don Schwend Gravel, change the company address, and the contact person. The current permit action is an administrative amendment. The current permit action also updates the permit to reflect current permit language and rule references used by the Department.

Section II: Conditions and Limitations

A. Emission Limitations

- 1. Schwend shall not cause or authorize to be discharged into the atmosphere, from any Standards of Performance for New Stationary Source (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 Code of Federal Regulations (CFR) 60, Subpart OOO).
- 2. Schwend shall not cause or authorize to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).

- 3. Schwend shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS-affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- 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 17.8.752).
- 5. Schwend 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 (ARM 17.8.308 and ARM 17.8.752).
- 6. Schwend 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 17.8.752).
- 7. Schwend shall not operate more than one screen at any given time and the maximum rated design capacity of the screen shall not exceed 400 TPH (ARM 17.8.749).
- 8. Total screening production from the facility shall be limited to 3,504,800 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Schwend shall not operate more than two crushers at any given time and the combined maximum design capacity of the crushers shall not exceed 800 TPH (ARM 17.8.749).
- 10. Total crushing production from the facility shall be limited to 7,008,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 11. Schwend shall not operate more than one diesel engine/generator at any given time and the maximum rated design capacity of the diesel-fired engine/generator shall not exceed 355-hp (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Schwend, 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. Schwend shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

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

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 Part 60.675, must be performed on any NSPS-affected equipment added to the facility under Permit #4072-01 to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR 60, Subpart A and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

D. Operational Reporting Requirements

- 1. If this portable crushing/screening 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 to which 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 (ARM 17.8.749 and ARM 17.8.765).
- 2. Schwend 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 Schwend as a permanent business record for at least 5 years following the date of the measurement; must be submitted to the Department upon request; and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 3. Schwend 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. Schwend 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. The 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. Schwend shall document, by month, the screening production from the facility. By the 25th day of each month, Schwend 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.8 (ARM 17.8.749).
- 6. Schwend shall document, by month, the crushing production from the facility. By the 25th day of each month, Schwend shall calculate 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.10 (ARM 17.8.749).

Section III: General Conditions

- A. Inspection Schwend 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 Schwend fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Schwend 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 the annual operation fee by Schwend may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Schwend 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 or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis Don Schwend Gravel MAQP #4072-02

I. Introduction/Process Description

A. Permitted Equipment

Don Schwend Gravel. (Schwend), owns and operates a portable non-metallic mineral processing plant (crushing/screening plant) consisting of up to two crushers (up to 800 tons per hour (TPH)); a screen (up to 400 TPH); a diesel-fired engine/generator (up to 355 horsepower (hp)), and associated material-handling equipment.

MAQP #4072-02 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of nonattainment areas for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). A Missoula County air quality permit will be required for locations within Missoula County, Montana. Schwend will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of any PM₁₀ nonattainment area.

B. Source Description

Schwend proposes to use this crushing/screening plant and associated equipment to crush sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a feeder. Materials are crushed by the crushers and sent to the screen. Materials are screened, separated, and sent to a stockpile for sale and use in construction operations.

C. Permit History

On June 14, 2007, Schwend Gravel Co. (Schwend) was issued **MAQP** #4072-00 for the operation of their portable crushing/screening operation, originally located in the SE ¼ of the SE ¼ of Section 30, Township 4 South, Range 22 East, in Carbon County, Montana, near the town of Joliet. This permit allowed Schwend to operate up to two crushers (up to 800 TPH), one screen (up to 400 TPH), a diesel generator (up to 308 hp), and associated equipment.

On February 8, 2008, the Department received a request to change the hp rating of the existing diesel-powered engine/generator from a rating of 308 hp to 355 hp. The permit action was an administrative amendment pursuant to ARM 17.8.764 that changed the existing engine rating of 308 hp to 355 hp. The emission inventory was updated to reflect these changes. The permit action also updated the permit to reflect current permit language, permit format, and rule references used by the Department. MAQP #4072-01 replaced Permit #4072-00.

D. Current Permit Action

On November 12, 2013, the Department received a request from Schwend Gravel Co. requesting MAQP #4072-01 be amended to change the name of the company to Don Schwend Gravel, change the company address, and the contact person. The current permit action is an administrative amendment. The current permit action also updates the permit to reflect current permit language and rule references used by the Department. **MAQP** #4072-02 replaces MAOP #4072-01.

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 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).

Schwend 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 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Schwend 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 that reasonable precautions be taken to control emissions of airborne Particulate Matter (PM). (2) Under this rule, Schwend 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 rule.
 - 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 rule.
 - 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 rule.
 - 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 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 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.

- a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below.
- b. 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, indicates that NSPS requirements apply to portable crushing/screening facilities with capacities greater than 150 tons per hour and that were constructed after August 31, 1983. Based on the information submitted by Schwend, the crushing/screening equipment is not NSPS-affected because of the size and date of manufacture of the equipment. However, since this permit is written in a de minimis friendly manner, should the proposed portable crushing/screening equipment be replaced with other unit(s) constructed, reconstructed, or modified after August 31, 1983, NSPS may apply.
- c. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary
 Compression Ignition (CI) Internal Combustion Engines (ICE), indicates
 that NSPS requirements apply to owners or operators of stationary CI ICE
 that commence construction after July 11, 2005, where the stationary CI
 ICE is manufactured after April 1, 2006, and is not a fire pump engine.
 Since this permit is written in a de minimis-friendly manner, this
 regulation may apply to stationary engines in the future.
- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u>

 <u>Categories.</u> The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. <u>40 CFR 63, Subpart A General Provisions apply</u> to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. A diesel RICE engine is considered stationary if it remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Since the permit is written in a de minimis-friendly manner, area source provisions of the MACT requirements would apply to any stationary RICE.
- 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 an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete

until the proper application fee is paid to the Department. 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 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 facility 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 of any pollutant. Schwend has a PTE greater than 15 tons per year of total PM, PM₁₀, carbon monoxide (CO), and oxides of nitrogen (NO_x); 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. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis 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, alteration, or use of a source. 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. <u>ARM 17.8.749 Conditions for Issuance or Denial 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.
- 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 Schwend 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. <u>ARM 17.8.762 Duration of Permit</u>. 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 accordance with Section III.H of the permit is 3 years 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 Schwend, 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.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow. This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (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 (HAPs), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
 - 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 #4072-02 for the Schwend facility, the following conclusions were made:
 - a. The facility's allowable PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility may become subject to area source provisions of a current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.
 - e. The facility may become 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 or a solid waste combustion unit.
- g. This source is not an Environmental Protection Agency (EPA) designated Title V source.

Based on these facts, the Department determined that Schwend is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit; Schwend may be subject to the Title V Operating Permit Program.

III. BACT Analysis

A BACT determination is required for any new or altered source. Schwend 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. The current permit action is an administrative action; and therefore, a BACT analysis is not required.

IV. Emission Inventory

	Controlled Emissions (ton/yr)					
Emitting Unit	PM	PM_{10}	NO _x	CO	VOC	SO _x
Up to 2 Crushers (up to 800 ton/hr)	4.20	1.89	0.00	0.00	0.00	0.00
Screen (up to 400 ton/hr)	3.85	1.30	0.00	0.00	0.00	0.00
Material Transfer	0.74	0.24	0.00	0.00	0.00	0.00
Pile Forming	5.61	2.63	0.00	0.00	0.00	0.00
Bulk Loading	11.56	3.89	0.00	0.00	0.00	0.00
Haul Roads and Vehicle Traffic	12.68	3.60	0.00	0.00	0.00	0.00
Diesel-Fired Generator (up to 355 hp)	3.42	3.42	37.32	10.39	3.84	3.18
Total Facility Emissions	42.06	16.97	37.32	10.39	3.84	3.18

Up to 2 Crushers (Up to 800 ton/hr)

Process Rate: 800 ton/hr (Company Information) Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0012 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.0012 lbs/ton * 800 ton/hr = 0.96 lb/hr

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

PM₁₀ Emissions:

Emission Factor: 0.00054 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.00054 lbs/ton * 800 ton/hr = 0.43 lb/hr

0.43 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.89 ton/yr

Screen (up to 400 ton/hr)

Process Rate: 400 ton/hr (Company Information)

Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.0022 lbs/ton * 400 ton/hr = 0.88 lb/hr

0.88 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.85 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.00074 lbs/ton * 400 ton/hr = 0.30 lb/hr

0.30 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.30 ton/yr

Material Transfer

Process Rate: 400 ton/hr (Company Information)
Number of Transfers 3 Transfers (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.00014 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.00014 lbs/ton * 400 ton/hr * 3 Transfers = 0.178 lb/hr

0.17 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.74 ton/yr

PM₁₀ Emissions:

Emission Factor: 4.60E-05 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.000046 lbs/ton * 400 ton/hr * 3 Transfers = 0.06 lb/hr

0.06 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.24 ton/yr

Pile Forming (1 Pile)

Process Rate: 400 ton/hr (Company Information)
Number of Piles 1 Pile (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0032 lbs/ton (AP-42, Section 13.2.4, Controlled Emissions, 1/95)

Calculations: 0.0032 lbs/ton * 400 ton/hr = 1.28 lb/hr

1.28 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 5.61 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.0015 lbs/ton (AP-42, Section 13.2.4, Controlled Emissions, 1/95)

Calculations: 0.0015 lbs/ton * 400 ton/hr = 0.60 lb/hr

0.60 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 2.63 ton/yr

Bulk Loading

Process Rate: 400 ton/hr (Company Information)

Number of Loads: 3 loads (Estimate)

Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.0022 lb/ton * 400 ton/hr * 3 loads = 2.64 lb/hr

0.0007 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 11.56 ton/yr

PM-10 Emissions:

Emission Factor: 0.00074lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)

Calculations: 0.00074 lb/ton * 400 ton/hr * 3 loads = 0.89 lb/hr

0.0007 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.89 ton/yr

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Haul Roads

Vehicle Miles Traveled (VMT): 5 VMT/day (Estimated)

Control Efficiency: 50% watering (Reasonable Precautions)
Rated Load Capacity: <50 tons (Company Information)

PM Emissions:

Emission Factor: 13.90 lb/VMT (DEQ Policy)

Calculations: E(PM)= (5 VMT/day)(13.90 lb/VMT)(50% Control)

E(PM)= 69.50 lb/day 12.68 ton/yr

PM₁₀ Emissions:

Emission Factor: 3.95 lb/VMT (DEQ Policy)

Calculations: E(PM10)= (5 VMT/day)(3.95 Lb/VMT)(50% Control)

E(PM10)= 19.75 lb/day 3.60 ton/yr

Diesel Generator (up to 355 hp)

Generator Capacity: 355 hp (Company Information) Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions (assume all PM = PM_{10})

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.0022 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 3.42 ton/yr

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.0022 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 3.42 ton/yr

NOx Emissions

Emission Factor: 0.024 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.024 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 37.32 ton/yr

CO Emissions

Emission Factor: 0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.00668 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 10.39 ton/yr

VOC Emissions

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.00247 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 3.84 ton/yr

SOx Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)

Calculations: 355 hp * 0.00205 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 3.18 ton/yr

V. Existing Air Quality

MAQP #4072-02 is issued for the operation of a portable crushing/screening facility. MAQP #4072-02 allows Schwend to operate at any location in Montana, which is designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS), excluding those counties that have a Department-approved permitting program, those areas considered Tribal

Lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. Schwend will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of PM_{10} nonattainment areas (such as Libby, Kalispell, Whitefish, Polson or Ronan).

VI. Air Quality Impacts

The Department determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined, based on this permitting action being an administrative amendment that the impacts will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

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

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

IX. 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.

Permit Analysis Prepared By: Craig Henrikson

Date: November 18, 2013