October 12, 2018

Havre Sand and Gravel, Inc.
Portable Crushing/Screening Plant
1663 US-2
Havre, MT 59501

Dear Mr. Otto:

Montana Air Quality Permit #2902-03 is deemed final as of October 12, 2018, by the Department of Environmental Quality (Department). 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
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Craig Henrikson, P.E.
Environmental Engineer
Air Quality Bureau
(406) 444-6711

JM:CH
Enclosure

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #2902-03

Havre Sand and Gravel, Inc.
1663 US-2
Havre, MT 59501

October 12, 2018

MONTANA AIR QUALITY PERMIT

Issued To: Havre Sand and Gravel, Inc.
1663 US-2
Havre, MT 59501

MAQP: #2902-03
Administrative Amendment (AA):
Request Received: 8/29/2018
Department's Decision Issued: 9/26/2018
Permit Final: 10/12/2018

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Havre Sand and Gravel (hereinafter referred to as "HSG") pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

HSG owns and operates a portable crushing/screening plant, which was last located in Section 25 30N 18E in Blaine County, Montana. However, MAQP #2902-03 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

B. Current Permit Action

On August 29, 2018, the Department received a request to transfer ownership from Baltrusch Construction to Havre Sand and Gravel, Inc (HSG). The current permit action maintains the company contact as Charles Otto. In addition, the permit action updates the current rule references and permit format.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

- For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

- For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

   - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

   - For equipment that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity

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 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. HSG 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. HSG shall treat all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).

7. HSG shall not operate more than two crushers at any given time and the combined maximum rated capacity of the crushers shall not exceed 600 TPH (ARM 17.8.749).

8. Crushing production is limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).

9. HSG shall not operate more than two screens at any given time and the combined maximum rated capacity of the screens shall not exceed 600 TPH (ARM 17.8.749).

10. Screening production is limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).

11. HSG shall not operate more than one generator at any given time and the maximum rated design capacity of the generators shall be 760 horsepower (hp).

12. HSG 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).

13. If the permitted equipment is used in conjunction with any other equipment owned or operated by HSG, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. 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. HSG 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 emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. HSG 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).

4. HSG shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

5. All records compiled in accordance with this permit must be maintained by HSG 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. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

6. HSG shall document, by month, the amount of crushing production from the facility. By the 25th day of each month, HSG shall calculate the total amount of crushing produced during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. HSG shall document, by month, the amount of screening production from the facility. By the 25th day of each month, HSG shall calculate the total amount of screening produced during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – HSG shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if HSG fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving HSG 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 action 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 MAQP shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by HSG 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. HSG shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Havre Sand and Gravel, Inc.
1663 US-2
Havre, MT 59501
MAQP #2902-03

I. Introduction/Process Description

Havre Sand and Gravel, Inc. (HSG) owns and operates portable crushing/screening plant operation, last located in Section 25 30N 18E in Blaine County Montana.

A. Permitted Equipment

HSG operates a portable 1988 EI-Jay 11-45 cone crusher (maximum capacity up to 200 tons per hour (TPH)), a Pioneer l5"x36" Jaw crusher (maximum capacity up to 200 TPH), a screen (maximum capacity 400 TPH), a screen (maximum capacity 200 TPH), a diesel generator (up to 760 horsepower (hp)), and associated equipment.

B. Source Description

HSG owns and operates a crushing and screening plant which crushes and screens material at the site. For a typical operational setup, materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor to the crushers. Crushed materials are then sent to the screens where materials are screened, separated, and stockpiled for sale and use in construction operations.

C. Permit History

On November 18, 1995, Baltrusch, Inc. was issued **Permit #2902-00** to operate a portable 1988 El-Jay 11-45 cone crusher (maximum capacity up to 200 TPH), a screen (maximum capacity 200 TPH), a diesel generator (up to 500 kilowatts (kW)), and associated equipment.

On October 23, 2006, the Department received a request to change the name on Permit #2902-00 from Baltrusch, Inc. to Bill Baltrusch Const., Inc. (Baltrusch). The permit action transferred ownership of Permit #2902-00 from Baltrusch, Inc. to Bill Baltrusch Const., Inc. and updated the permit to reflect current rule references, permit language, and permit format. **Permit #2902-01** replaced Permit #2902-00.

On October 22, 2007, the Department received a request from Baltrusch to include a 400 TPH crusher and 400 TPH screen to the permitted equipment. The crusher and screen operate as a single process unit, but were permitted as separate emitting units. In addition, an accurate design capacity for the diesel generator was also obtained. The permit action updated the permit to include operation of the 400 TPH crusher and screen as well as updated information regarding the diesel generator. **Permit #2902-02** replaced Permit #2902-01.

D. Current Permit Action

On August 29, 2018, the Department received a request to transfer ownership from Baltrusch to Havre Sand and Gravel, Inc (HSG). The current permit action maintains the company contact as Charles Otto. In addition, the permit action updates the current rule references and permit format. **MAQP #2902-03** replaces MAQP #2902-02.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

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

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

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
11. ARM 17.8.230 Fluoride in Forage

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

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, HSG shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of

50 grains per 100 dry standard cubic feet (dscf) of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

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 is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing 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, shall comply with the standards and provisions of 40 CFR Part 60.

   In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted, the facility is subject to NSPS requirements (40 CFR 60, Subpart A -- General Provisions, and Subpart OOO-Non-Metallic Mineral Processing Plants).

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below: This source does not meet the definition of an affected facility.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

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

   An air quality operation fee is separate and distinct from an MAQP 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 prorate the required fee amount.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an MAQP or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. HSG has a PTE greater than 15 tons per year of particulate matter (pm); PM_{10} and oxides of nitrogen, therefore, an MAQP is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. HSG was not required to submit a permit application for the current permit action because it is considered an administrative amendment. (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. HSG was not required to submit a public notice for the current permit action because it is considered an administrative amendment.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. This action was an administrative amendment and therefore a BACT analysis was not required.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving HSG 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 MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An MAQP may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack 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 MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2902-03 for HSG, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.

   c. This source is not located in a serious PM_{10} nonattainment area.

   d. This facility is currently subject to NSPS (40 CFR 60, Subpart A General Provisions, Subpart OOO, Non-Metallic Mineral Processing Plants) standards.

   e. This facility is not subject to any current NEHSAP.

   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 HSG will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS

are required to obtain a Title V Operating Permit, HSG will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

	Emissions Tons/Year [PTE]							
Emission Source	PM	PM_{10}	$PM_{2.5}$	$PM_{Cond.}$	CO	NO_x	SO_2	VOC
Cone Crusher (up to 200 TPH)	1.05	0.47	0.09					
Jaw Crusher (up to 400 TPH)	2.10	0.95	0.18					
Screen (up to 200 TPH)	1.93	0.65	0.04					
Screen (up to 400 TPH)	3.85	1.30	0.09					
Truck Unloading	0.04	0.00	0.00					
Pile Forming	17.36	8.21	1.24					
Truck Loading	0.37	0.12	0.00					
Diesel Generator (760 hp)	2.33	2.33	2.33	0.18	18.31	79.89	6.82	2.35
Unpaved Roadways (Haul Roads)	5.49	1.51	0.15					
EMISSIONS (Excluding Haul Roads)	29.04	14.03	3.97	0.18	18.31	79.89	6.82	2.35

Havre Sand and Gravel

Cone Crusher (200 tph)

Process Rate:	200	ton/hr			
Operating Hours	8760	hours/year	Capacity	1752000	ton/yr

PM Emissions:

Emission Factor	0.0012	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0012 lbs/ton) * (200.00 ton/hour) =			0.24	lbs/hr
	(0.24 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.05	TPY

PM_{10} Emissions:

Emission Factor	0.00054	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00054 lbs/ton) * (200.00 ton/hour) =			0.11	lbs/hr
	(0.11 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.47	TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.0001	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0001 lbs/ton) * (200.00 ton/hour) =			0.02	lbs/hr
	(0.02 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.09	TPY

Truck Unloading (Assume all material is unloaded that can be processed in the crusher)

Process Rate:	600.0	ton/hr (Assumes each crusher operates independently)
Operating Hours	8760	hours/year

PM_{10} Emissions:

Emission Factor	0.000016	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000016 lbs/ton) * (600.00 ton/hour) =			0.01	lbs/hr
	(0.01 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.04	TPY

Jaw Crusher (400 tph)

Process Rate:	400	ton/hr			
Operating Hours	8760	hours/year	Capacity	3504000	ton/yr

PM Emissions:

Emission Factor	0.0012	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0012 lbs/ton) * (400.00 ton/hour) =			0.48	lbs/hr
	(0.24 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			2.10	TPY

PM_{10} Emissions:

Emission Factor	0.00054	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00054 lbs/ton) * (400.00 ton/hour) =			0.22	lbs/hr
	(0.22 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.95	TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.0001	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0001 lbs/ton) * (400.00 ton/hour) =			0.04	lbs/hr
	(0.04 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.18	TPY

Screen (200 tph)

Process Rate:	200	ton/hr			
Operating Hours	8760	hours/year	Capacity	1752000	ton/yr

PM Emissions:

Emission Factor	0.0022	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0022 lbs/ton) * (200.00 ton/hour) =			0.44	lbs/hr
	(0.24 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.93	TPY

PM_{10} Emissions:

Emission Factor	0.00074	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00074 lbs/ton) * (200.00 ton/hour) =			0.15	lbs/hr
	(0.15 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.65	TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.00005	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00005 lbs/ton) * (200.00 ton/hour) =			0.01	lbs/hr
	(0.01 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.04	TPY

Screen (400 tph)

Process Rate:	400	ton/hr			
Operating Hours	8760	hours/year	Capacity	3504000	ton/yr

PM Emissions:

Emission Factor	0.0022	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0022 lbs/ton) * (400.00 ton/hour) =			0.88	lbs/hr
	(0.24 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			3.85	TPY

PM_{10} Emissions:

Emission Factor	0.00074	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00074 lbs/ton) * (400.00 ton/hour) =			0.30	lbs/hr
	(0.30 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.30	TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.00005	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00005 lbs/ton) * (400.00 ton/hour) =			0.02	lbs/hr
	(0.02 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.09	TPY

Pile Formation (Assume 400 tph)

			# Piles (2 per EI)				
Process Rate:	600	ton/hr	Equation 1 from AP-42 Sec 13.2.4.3 11/06				
Operating Hours	8760	hrs/year	U = wind speed miles per hour	9.3	(Application)		
			k = particle size multiplier	0.74	AP-42 Sec 13.2.4-3 11/06		
PM Emissions:			M = Moisture content %	2.1	Application, Ap-42, Table 13.2.4-1)		
Emission Factor	0.004955455	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4				
Calculations	(0.00496 lbs/ton) * (600.00 ton/hour) =				2.97	lbs/hr	
	(2.97 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				13.02	TPY	
			# of Piles	2	26.05	TPY	
			Equation 1 from AP-42 Sec 13.2.4.3 11/06				
			U = wind speed miles per hour	9.3	9.3	(Application)	
			k = particle size multiplier	0.35	0.35	AP-42 Sec 13.2.4-3 11/06	
PM_{10} Emissions:			M = Moisture content %	2.1	2.1	Application, Ap-42, Table 13.2.4-1)	
Emission Factor	0.002343796	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4				
Calculations	(0.00234 lbs/ton) * (600.00 ton/hour) =				1.41	lbs/hr	
	(1.41 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				6.16	TPY	

			# of Piles	2	12.32	TPY
$PM_{2.5}$ Emissions:			Equation 1 from AP-42 Sec 13.2.4.3 11/06			
			U = wind speed miles per hour	9.3	8.15	(Typical Value)
			k = particle size multiplier	0.053	0.35	AP-42 Sec 13.2.4-3 11/06
			M = Moisture content %	2.1	2.1	Application, Ap-42, Table 13.2.4-1)
Emission Factor	0.000354918	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4			
Calculations	(0.00035 lbs/ton) * (600.00 ton/hour) =				0.21	lbs/hr
	(0.21 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				0.93	TPY
			# of Piles	2	1.87	TPY

Truck Loading (Assume all material is eventually loaded)

Modeled as Truck Loading Conveyor

Process Rate:	600	ton/hr			
Operating Hours	8760	hours/year			
PM Emissions:					
Emission Factor	0.00014	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00014 lbs/ton) * (600.00 ton/hour) =			0.08	lbs/hr
	(0.08 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.37	TPY
PM_{10} Emissions:					
Emission Factor	0.000046	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000046 lbs/ton) * (600.00 ton/hour) =			0.03	lbs/hr
	(0.03 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.12	TPY

Diesel Generator (760 hp)

Engine Rating:	760	hp			
Operating Hours:	8760	hrs/yr			
Fuel Input	5.32	MMbtu/hr	BSFC = 7,000 BTU/hp-hr (AP42 Table 3.3-1 10/96)		
	38.832	gallons/hr (137,000 BTU/gal)			

Particulate Emissions:

PM Emissions:					
Emission Factor	0.0007	lb/hp-hr	[AP-42 Table 3.4-1]		
Calculations	(0.0007 lb/hp-hr) * (760 hp) =			0.53	lbs/hr
	(0.53 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			2.33	TPY

PM_{10}
Emissions:

Emission Factor	0.000700	lb/hp-hr	[AP42 Table 3.4-1]		
Calculations	(0.0007 lb/hp-hr) * (760 hp) =			0.53	lbs/hr
	(0.53 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			2.33	TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor	0.0007000	lb/hp-hr	[AP42 Table 3.4-1]		
Calculations	(0.0007 lb/hp-hr) * (760 hp) =			0.53	lbs/hr
	(0.53 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			2.33	TPY

$PM_{2.5}$ Emissions
(condensable):

Emission Factor	0.0077	MMBtu	[AP-42 3.4-2, 10/96]		
Calculations	(0.0077 lb/MMBtu) * (5.32 MMBtu/hr) =			0.04	lbs/hr
	(0.04 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			0.18	TPY

CO
Emissions:

Emission Factor	0.00550	lb/hp-hr	[AP-42 Table 3.4-1]		
Calculations	(0.0055 lb/hp-hr) * (760 hp) =			4.18	lbs/hr
	(4.18 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			18.31	TPY

NOx
Emissions:

Emission Factor	0.0240	lb/hp-hr	(AP-42 Table 3.4-1)		
Calculations	(0.024 lb/hp-hr) * (760 hp) =			18.24	lbs/hr
	(18.24 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			79.89	TPY

SO_x
Emissions:

Emission Factor	0.00205	lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.0021 lb/hp-hr) * (760 hp) =			1.56	lbs/hr
	(1.56 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			6.82	TPY

VOC
Emissions:

Emission Factor	0.00071	lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.0007 lb/hp-hr) * (760 hp) =			0.54	lbs/hr
	(0.54 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			2.35	TPY

Unpaved Roadways
(Haul Roads)

Emission Factor	EF = k(s/12)^a * (W/3)^b		[AP-42 13.2.2.2, 11/06]
	EF, Emission Factor =	lbs Emitted Per Vehicle Mile Traveled (VMT)	
	k, Empirical Constant PM =	4.9	[AP-42 Table 13.2.2-2, 11/06]

k, Empirical Constant PM_{10} =	1.5	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant $PM_{2.5}$ =	0.15	[AP-42 Table 13.2.2-2, 11/06]
s, Surface Material Silt Content (%) =	7.1	[AP-42 Table 13.2.2-1, 11/06]
W, Mean Vehicle Weight (tons) =	50	[Estimated]
a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
a, Empirical Constant PM_{10} and $PM_{2.5}$ =	0.9	[AP-42 Table 13.2.2-2, 11/06]
b, Empirical Constant PM , PM10 and $PM_{2.5}$ =	0.45	[AP-42 Table 13.2.2-2, 11/06]

PM Emissions(uncontrolled): PM30

Emission Factor	EF = 4.9 * (7.1/12)^0.7 * (50/3)^0.45 =	12.04	lbs/VMT	
Calculations	(12.04 lbs/VMT) * (5 miles/day) =		60.18	lbs/day
	(60.18 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		10.98	TPY
	50% Control Efficiency		5.49	TPY

PM_{10} Emissions(uncontrolled):

Emission Factor	EF = 1.5 * (7.1/12)^0.9 * (50/3)^0.45 =	3.32	lbs/VMT	
Calculations	(3.32 lbs/VMT) * (5 miles/day) =		16.59	lbs/day
	(16.59 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		3.03	TPY
	50% Control Efficiency		1.513545	TPY

$PM_{2.5}$ Emissions(uncontrolled):

Emission Factor	EF = 0.15 * (7.1/12)^0.9 * (50/3)^0.45 =	0.33	lbs/VMT	
Calculations	(0.33 lbs/VMT) * (5 miles/day) =		1.66	lbs/day
	(1.66 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		0.30	TPY
	50% Control Efficiency		0.15	TPY

*Emissions Inventory and Calculation Notes:

bhp = brake horsepower
Btu = british thermal unit
HAP = hazardous air pollutant
hr = hour
lb = pound
MM denotes 10^6, M denotes 10^3
N/A = not applicable
ND = no data available
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_2 = oxides of sulfur
SO_2 = sulfur dioxide
scf = standard cubic feet
VMT = vehicle miles traveled

V. Existing Air Quality

MAQP #2902-03 is issued for the operation of a portable crushing/screening plant last recorded located in Section 25 30N 18E in Blaine County, Montana. This facility would be allowed to operate at this site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding counties that have a Department-approved permitting program, areas considered tribal lands, or areas in or within 10 km of certain PM

nonattainment areas. The permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area.

VI. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action will be minor as this is an administrative amendment. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

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

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

VII. Environmental Assessment

An Environmental Assessment was not required for this permitting action because it is considered an administrative amendment.

MAQP Analysis prepared by: Craig Henrikson
Date: September 4, 2018