

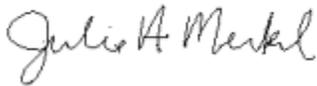
June 7, 2018

Clarence Davis
Environmental Manager
HK Contracting, Inc.
P.O. Box 51450
Idaho Falls, ID 83450

Dear Mr. Davis:

Montana Air Quality Permit #3091-02 is deemed final as of June 7, 2018, by the Department of Environmental Quality (Department). This permit is for a Portable Crushing/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
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626



John P. Proulx
Air Quality Specialist
Air Quality Bureau
(406) 444-5391

JM:JPP
Enclosure

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #3091-02

HK Contracting, Inc.
P.O. Box 51450
Idaho Falls, ID 83450

June 7, 2018



MONTANA AIR QUALITY PERMIT

Issued To: HK Contractors, Inc.
P.O. Box 51450
Idaho Falls, Idaho 83405

Montana Air Quality Permit: #3091-02
Administrative Amendment (AA)
Request Received: 5/9/2018
Department Decision on AA: 5/22/2018
Permit Final: 6/7/2018
AFS #: 777-3091

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to HK Contractors, Inc. (HK) 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

MAQP #3091-02 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 (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

B. Current Permit Action

During a Department of Environmental Quality (Department) review, staff discovered the Montana Air Quality Permit (MAQP) #3091-01 was missing a necessary administrative reference for the authority to use enforceable permit conditions to limit a source's potential emissions to below the Title V major source threshold. Because HK accepted limits on hourly operations for the diesel engines in its MAQP to stay below the Title V permit threshold, the Department established such limits in the MAQP. These limits were missing the required rule reference ARM 17.8.1204, which describes the Department's authority to establish limits for this purpose.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Sources (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, other than a crusher (such as screens or conveyor transfers), 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 equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commences 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 17.8.752).
 5. HK 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 (ARM 17.8.308 and ARM 17.8.752).
 6. HK shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
 7. HK shall not operate more than four crushers at any given time and the combined maximum rated design capacity of the crushers shall not exceed 1600 tons per hour (TPH) (ARM 17.8.749).
 8. HK shall not operate more than five screens at any given time and the total maximum rated design capacity of the screens shall not exceed 1600 TPH (ARM 17.8.749). This does not prevent operation of any integral screens located on permitted crushers at the same time as the other independent screens.
 9. HK shall not operate more than three diesel-fired engines driving electrical generators (or directly driving crushers, screens, etc.) at any given time and the combined maximum rated design capacity shall not exceed 2810 horsepower (hp) as determined by the rated size of the engines powering the generators (ARM 17.8.749).

10. The total hours of each of the three diesel-fired engines that may be used under this permit shall be limited to 2,000 hours of operation during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
11. If the permitted equipment is used in conjunction with any other equipment owned or operated by HK, 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).
12. HK shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, 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).
13. HK shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

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

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 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. HK shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

3. HK 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 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).
4. HK shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by HK as a permanent business record for at least 5 years following the date of the measurement, must be available for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
5. HK shall annually certify that its emissions are less than would otherwise require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).
6. HK shall document, by month, the hours of operation of the diesel engine/generators. By the 25th of each month, HK shall calculate the hours of operation each diesel engine/generator for the previous month. The monthly information will be used to demonstrate 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 - HK 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 Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (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 HK fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving HK of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, failure to pay of the annual operation fee by HK 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. HK 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
HK Contractors, Inc.
MAQP #3091-02

I. Introduction/Process Description

A. Permitted Equipment

HK Contractors, Inc., (HK) operates up to four crushers with integral screens as well as five independent screens and associated conveyors and up to three diesel-fired engines with a combined total horsepower (hp) of 2810. The total crushing capacity is limited to 1600 tons/hr (TPH) and total screening capacity is limited to 1600 TPH. A total of four independent crushers and five independent screens may be operated simultaneously.

1977 Cedar Rapids Jaw Crusher
2000 JCI K400 Kodiak Cone Crusher
2004 JCI 300H Kodiak Cone Crusher
2004 Barmac 9000 Crusher
2004 JCI Screen
1997 ELJAY Screen
1997 Cedar Rapids Screen
2004 Pioneer Screen
1988 Pioneer Screen
1991 1600 kW Caterpillar Diesel Generator
2012 425 kW Caterpillar Diesel Generator
2004 70 kW Whisper Watt Generator

B. Source Description

HK uses this crushing/screening plant and associated equipment to crush, screen and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the primary impact crusher using a wheeled loader, and then fed to the secondary crushers. Material is separated by screening and finally sent to stockpiles for sale and use in construction operations. Conveyors transport the gravel between the various components.

C. Home Pit Location

HK does not have a home pit in Montana and at the date of this permit update was not operating at any location in Montana but submitted an Intent to Transfer request from their previously designated Montana location to an existing pit just north of Gardiner, MT.

D. Permit History

On March 27, 2000, HK was issued **MAQP #3091-00** to operate a portable crushing and screening facility. The original permit application indicates a total of four crushers and five screens were originally permitted along with a single diesel generator and associated equipment.

On June 15, 2012, the Department received a request from HK to modify MAQP #3091-00 by preparing a revised permit with de minimis friendly limitations. Additional information was also received on July 17, 2012 related to the horsepower ratings of permitted engines. The primary reason for preparing the modification is to provide flexibility within the permit for the diesel generator operation and update the emission inventories to reflect the equipment in operation. The permit also updated rule references and updated the permit to more recent language. This modification request is the result of a Full Compliance Evaluation (FCE) indicating that a smaller generator than was specified in the permit was being operated suggesting the need to develop a permit written in a de minimis manner.

Under the permit action, a total of four crushers and five screens were allowed with a combined total design capacity for each category of 1600 TPH. Up to three diesel-fired engines were also included with a maximum total hp rating of 2810. **MAQP #3091-01** replaces MAQP #3091-00.

E. Current Permit Action

During a Department of Environmental Quality (Department) review, staff discovered the Montana Air Quality Permit (MAQP) #3091-01 was missing a necessary administrative reference for the authority to use enforceable permit conditions to limit a source's potential emissions to below the Title V major source threshold. Because HK accepted limits on hourly operations for the diesel engine as well as operational limits of asphalt production limits in its MAQP to stay below the Title V permit threshold, the Department established such limits in the MAQP. These limits were missing the required rule reference ARM 17.8.1204, which describes the Department's authority to establish limits for this purpose. MAQP #2566-08 adds this rule reference as well as updates the permit to reflect current Department language. **MAQP #3091-02** replaces MAQP #3091-01.

F. 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. 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).

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

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

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

1. ARM 17.8.204 Ambient Air Quality Monitoring
2. ARM 17.8.210 Ambient Air Quality Standard for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standard for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standard 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 17.8.223 Ambient Air Quality Standard for PM₁₀

HK 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, HK shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). HK is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. 40 CFR 60, Subpart A. – General Provisions apply to all equipment of facilities subject to an NSPS Subpart as listed below.

- b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983.

Based on the information submitted by HK, the portable crushing equipment to be used under MAQP #3091-02 is subject to this requirement because it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.

- c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Owners and operators of stationary compression ignition internal combustion engines (CI ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, are subject to this subpart. In order to keep the permit de minimis-friendly, this permit authorizes the use of three diesel fired engines to drive electrical generators and the combined maximum rated design capacity shall not exceed 2810 hp. Based on the information submitted to the Department, one or more of the diesel engines to be used under MAQP #3091-02 may be subject to this subpart if the engine(s) are determined to meet the definition of a stationary. Engines that are added in the future may also be subject to this subpart.

- 8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment of facilities subject to a NESHAP Subpart as listed below:
- b. 40 CFR 63, Subpart ZZZZ – NESHAPs 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 RICE 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. Based on the information submitted by HK, the RICE equipment to be used under this permit may be subject to this subpart if the engine(s) are determined to meet the definition of a stationary engine as the term is defined for this subpart. Engines that are added in the future may also be subject to this subpart.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee was not required for the current permit action because the permit action is considered an administrative amendment.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. HK has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), Carbon Monoxide (CO), and oxides of nitrogen (NO_x); 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. 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. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this Permit Analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving HK 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 MAQP 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 it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

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

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

- a. PTE > 100 tons/year of any pollutant;
- b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
- c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3091-02 for HK, the following conclusions were made:

- a. The facility's PTE is less than 100 tons/year for any pollutant.
- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is subject to current NSPS (40 CFR 60, Subpart A, Subpart OOO, and potentially Subpart IIII).
- e. This facility is potentially subject to current NESHAP standards (40 CFR 63, Subpart A and Subpart ZZZZ).
- f. This source is not a Title IV affected source.
- g. This facility is not a solid waste combustion unit.
- h. This source is not an EPA designated Title V source.

HK requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility 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; this source will be subject to the Title V Operating Permit Program.

- i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.

- ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness.

This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. HK shall install on the new or modified source the maximum air pollution control capability which is technologically 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

Emission Source	Emissions Tons/Year [PTE]						
	PM	PM ₁₀	PM _{2.5}	CO	NO _x	SO _x	VOC
Impact Crushers (Total of Four)	8.41	3.78	0.70				
Truck Unloading (Assume all material is unloaded that can be processed in crushers)	0.00	0.11					
Screens (Independent and Integral crusher screens)	30.84	10.37	0.70				
Transfer Points (Assume 5 Transfer Points)	0.98	0.32	0.09				
Pile Formation (Assumes each independent screen forms a Pile)	22.66	10.72	1.62				
Truck Loading (Assume all material is eventually loaded)	0.98	0.32					
Diesel Generators (Total 2240 hp)	4.93	4.93	4.93	14.96	69.42	4.59	5.62
Diesel Generator (Total 570 hp)	0.02	0.02	0.02	3.25	2.51	1.17	1.43
Unpaved Roadways (Haul Roads)	5.39	1.49	0.15				
TOTAL EMISSIONS >	74.21	32.06	8.21	18.21	71.93	5.76	7.05

**HK Contractors, Inc. Emission Inventory
Calculation Details**

Crusher Total Capacity with Integral
Enclosed Screens

**Crusher
Capacity**

Process Rate: 1600 ton/hr
Operating Hours: 8760 hours/year

PM
Emissions:

Emission Factor: 0.0012 lbs/ton [AP-42 Table 11.19.2-2 8/04]
Calculations: $(0.0012 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) = 1.92 \text{ lbs/hr}$
 $(1.92 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 8.41 \text{ TPY}$

PM₁₀
Emissions:

Emission Factor: 0.00054 lbs/ton [AP-42 Table 11.19.2-2 8/04]
Calculations: $(0.00054 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) = 0.86 \text{ lbs/hr}$
 $(0.86 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 3.78 \text{ TPY}$

PM_{2.5}
Emissions:

Emission Factor: 0.0001 lbs/ton [AP-42 Table 11.19.2-2 8/04]
Calculations: $(0.0001 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) = 0.16 \text{ lbs/hr}$
 $(0.16 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.70 \text{ TPY}$

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

Process Rate: 1600.0 ton/hr (Assumes each crusher operates independently)
 Operating Hours: 8760 hours/year

PM₁₀
 Emissions:

Emission Factor: 0.00016 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Calculations: (0.00016 lbs/ton) * (1,600.00 ton/hour) = 0.03 lbs/hr
 (0.03 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.11 TPY

Screening (Total of independent and screens integral to crushers)

Process Rate: 3200 ton/hr
 Operating Hours: 8760 hours/year

PM Emissions: (Screening controlled)

Emission Factor: 0.0022 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Calculations: (0.0022 lbs/ton) * (3,200.00 ton/hour) = 7.04 lbs/hr
 (7.04 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 30.8 TPY
 4

PM₁₀
 Emissions:

Emission Factor: 0.00074 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Calculations: (0.00074 lbs/ton) * (3,200.00 ton/hour) = 2.37 lbs/hr
 (2.37 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 10.3 TPY
 7

PM_{2.5}
 Emissions:

Emission Factor: 0.00005 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations	$(0.00005 \text{ lbs/ton}) * (3,200.00 \text{ ton/hour}) =$	0.16 lbs/hr
	$(0.16 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) *(0.0005 \text{ tons/lb}) =$	0.70 TPY

Transfer Points (Assume 5 Transfer Point that are Controlled)

Process Rate:	1600 ton/hr (Assumes each crusher and screen have one transfer point combined)
Operating Hours	8760 hours/year

PM Emissions: (Conveyor Transfer Points)

Emission Factor	0.00014 lbs/ton [AP-42 Table 11.19.2-2 14 8/04]	
Calculations	$(0.00014 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) =$	0.22 lbs/hr
	$(0.22 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) *(0.0005 \text{ tons/lb}) =$	0.98 TPY

PM₁₀ Emissions:

Emission Factor	0.000046 lbs/ton [AP-42 Table 11.19.2-2 8/04]	
Calculations	$(0.000046 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) =$	0.07 lbs/hr
	$(0.07 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) *(0.0005 \text{ tons/lb}) =$	0.32 TPY

PM_{2.5} Emissions:

Emission Factor	0.000013 lbs/ton [AP-42 Table 11.19.2-2 8/04]	
Calculations	$(0.000013 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) =$	0.02 lbs/hr
	$(0.02 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) *(0.0005 \text{ tons/lb}) =$	0.09 TPY

Pile Formation (Assume equipment thru-put is crusher total capacity)

Process Rate:	1600	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	8.15	(Typical Value)
			k = particle size multiplier	0.74	AP-42 Sec 13.2.4-3 11/06
PM Emissions:			M = Moisture content %	2.52	(Typical Value)
Emission Factor	0.003	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
	2337				
	5				
Calculations	(0.00323 lbs/ton) * (1,600.00 ton/hour) =			5.17	lbs/hr
	(5.17 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			22.6	TPY
				6	
			Equation 1 from AP-42 Sec 13.2.4.3 11/06		
			U = wind speed miles per hour	8.15	8.15 (Typical Value)
			k = particle size multiplier	0.35	0.35 AP-42 Sec 13.2.4-3 11/06
PM ₁₀ Emissions:			M = Moisture content %	2.52	2.52 (Typical Value)
Emission Factor	0.001	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
	5294				
	8				
Calculations	(0.00153 lbs/ton) * (1,600.00 ton/hour) =			2.45	lbs/hr
	(2.45 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			10.7	TPY
				2	
PM _{2.5} Emissions:			Equation 1 from AP-42 Sec 13.2.4.3 11/06		
			U = wind speed miles per hour	8.15	8.15 (Typical Value)
			k = particle size multiplier	0.05	0.35 AP-42 Sec 13.2.4-3 11/06
				3	

M = Moisture content % 2.52 2.52 (Typical Value)

Emission Factor 0.00023161 lbs/ton $E=k*(0.0032)*(U/5)^{1.3}/(M/2)^{1.4}$

Calculations (0.00023 lbs/ton) * (1,600.00 ton/hour) = 0.37 lbs/hr
 (0.37 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 1.62 TPY

Truck Loading (Assume all material is eventually loaded)

Modeled as Truck Loading Conveyor

Process Rate: 1600 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) * (1,600.00 ton/hour) = 0.22 lbs/hr
 (0.22 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.98 TPY

PM₁₀ Emissions:

Emission Factor 0.000046 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.000046 lbs/ton) * (1,600.00 ton/hour) = 0.07 lbs/hr
 (0.07 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.32 TPY

Diesel Generators (Total 2240 hp) (Two lowest rated engines for emission purposes)

Engine Rating: 2239.47 hp Indicated they had 1600 kw and 70 kw - used hp ratings from application
 Operating Hours: 2000 hrs/yr 1670 2239.47

Particulate Emissions:

PM Emissions:

Emission Factor	0.002 lb/hp-hr	[AP-42 3.3-1, 10/96]	
	2		
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

PM₁₀ Emissions:

Emission Factor	0.002 lb/hp-hr	[AP-42 3.3-1, 6/06]	
	2		
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

PM_{2.5} Emissions:

Emission Factor	0.002 lb/hp-hr	[AP-42 3.3-1, 10/96]	
	2		
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

CO Emissions:

Emission Factor	0.006 lb/hp-hr	[AP-42 3.3-1, 6/06]	
	68		
Calculations	(0.00668 lb/hp-hr) * (2239.47 hp) =		14.9 lbs/hr
	(14.96 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		14.9 TPY
	=		6

NO_x Emissions:

Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.031 lb/hp-hr) * (2239.47 hp) =		69.4 lbs/hr
	(69.42 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		69.4 TPY
	=		2

SO_x

Emissions:

Emission Factor	0.002 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0021 lb/hp-hr) * (2239.47 hp) =		4.59 lbs/hr
	(4.59 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.59 TPY

VOC

Emissions:

Emission Factor	0.002 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0025 lb/hp-hr) * (2239.47 hp) =		5.62 lbs/hr
	(5.62 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		5.62 TPY

Diesel Generator (Total 570 hp)

Engine Rating:	569.9 hp	Indicated they had 425 kw used hp rating from application
Operating Hours:	25 hrs/yr	
	2000 hrs/yr	

Particulate Emissions:

PM

Emissions:

Emission Factor	0.000 lb/hp-hr	tier 4 interim	
	033 [AP-42 3.3-1, 10/96]		
Calculations	(0.000033 lb/hp-hr) * (2239.47 hp) =		0.02 lbs/hr
	(0.02 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		0.02 TPY

PM₁₀

Emissions:

Emission Factor	0.000 lb/hp-hr	tier 4 interim	
	03 [AP-42 3.3-1, 6/06]		
Calculations	(0.000033 lb/hp-hr) * (2239.47 hp) =		0.02 lbs/hr
	(0.02 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		0.02 TPY

PM_{2.5}**Emissions:**

Emission Factor	0.0003	lb/hp-hr [AP-42 3.3-1, 10/96]	tier 4 interim	
Calculations		(0.000033 lb/hp-hr) * (2239.47 hp) =		0.02 lbs/hr
		(0.02 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		0.02 TPY

CO**Emissions:**

Emission Factor	0.0057	lb/hp-hr [AP-42 3.3-1, 6/06]	tier 4 interim	
Calculations		(0.0057 lb/hp-hr) * (2239.47 hp) =		3.25 lbs/hr
		(3.25 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		3.25 TPY

NO_x**Emissions:**

Emission Factor	0.0044	lb/hp-hr [AP-42 3.3-1, 6/06]	tier 4 interim	
Calculations		(0.0044 lb/hp-hr) * (2239.47 hp) =		2.51 lbs/hr
		(2.51 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		2.51 TPY

SO_x**Emissions:**

Emission Factor	0.0021	lb/hp-hr [AP-42 3.3-1, 6/06]		
Calculations		(0.0021 lb/hp-hr) * (2239.47 hp) =		1.17 lbs/hr
		(1.17 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		1.17 TPY

VOC**Emissions:**

Emission Factor	0.0025	lb/hp-hr [AP-42 3.3-1, 6/06]		
Calculations		(0.0025 lb/hp-hr) * (2239.47 hp) =		1.43 lbs/hr
		(1.43 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		1.43 TPY

V. Existing Air Quality

The surrounding area is considered attainment/unclassified for the National Ambient Air Quality Standards (NAAQS).

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

This permit is for a portable crushing and screening facility. Permit 3091-02 will cover the operation at any location within the State of Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be short-lived.

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	
X		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?

YES	NO	
	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.

Analysis Prepared By: John P. Proulx

Date: May 3, 2018