Air, Energy, & Mining Division



May 22, 2017

Clarence Davis, Environmental Manager H-K Contractors, Inc. P.O. Box 51450 Idaho Falls, ID 83405

Dear Mr. Davis:

Montana Air Quality Permit #2977-01 is deemed final as of May 20, 2017, by the Department of Environmental Quality (Department). This permit is for a Portable Asphalt 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,

Julis A Merkel

Julie A. Merkel Permitting Services Section Supervisor Air Quality Bureau (406) 444-3626

JM:JPP Enclosure

for Part Prank

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

Montana Department of Environmental Quality Air, Energy, and Mining Division

Montana Air Quality Permit #2977-01

H-K Contractors, Inc. P.O. Box 51450 Idaho Falls, ID 83405

May 20, 2017



MONTANA AIR QUALITY PERMIT

Issued To: H-K Contractors, Inc. P.O. Box 51450 Idaho Falls, ID 83405

MAQP: #2977-01 Administrative Amendment (AA) Request Received: 5/1/2017 Department Decision on AA: 5/4/2017 Permit Final: 5/20/2017 AFS #: 777-2977

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

H-K operates a portable asphalt facility at various locations throughout Montana. MAQP #2977-01 applies while operating in any location throughout the State of Montana, except within those areas that have a Department of Environmental Quality (Department) approved permitting program. A Missoula County Air Quality Permit will be required for locations within Missoula County. An addendum will be required for locations in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

B. Current Permit Action

During a Department of Environmental Quality (Department) review, staff discovered that Montana Air Quality Permit (MAQP) #2977-01 was missing a necessary administrative rule 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 H-K accepted limits on maximum annual production in its MAQP to stay below the Title V permit threshold, the Department established such limits in the MAQP. This limit was missing the required reference of ARM 17.8.1204 which describes the Department's authority to establish limits for this purpose. This strategy also requires that the source provide an annual certification that emissions were less than a level which would require a Title V Operating Permit which was missing from MAQP #2977-01. MAQP #2977-02 adds this rule reference and annual certification submission requirement as well as updates other rule references and permit language.

SECTION II: Conditions and Limitations

- A. Emission Limitations
 - 1. H-K shall operate and maintain all control equipment as specified in their application for their Montana Air Quality permit and all supporting documentation. (ARM 17.8.749 and ARM 17.8.752).

- 2. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). (ARM 17.8.340, ARM 17.8.752, and Title 40 Code of Federal Regulations (CFR) 60, Subpart I).
- 3. H-K shall not cause or authorize to be discharged into the atmosphere from the asphalt plant stack, emissions that exhibit 20% opacity or greater, averaged over six consecutive minutes. (ARM 17.8.304 and ARM 17.8.752)
- 4. H-K shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater, averaged over six consecutive minutes. (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I)
- 5. H-K 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 (ARM 17.8.308 and ARM 17.8.752).
- 6. H-K 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. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) on the control device (baghouse) must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.749).
- 8. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
- 9. Plant operation hours shall be limited to a maximum of 4000 hours during any twelve (12) month period (ARM 17.8.1204).
- 10. If the permitted equipment is used in conjunction with any other equipment owned or operated by H-K, 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).
- H-K shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities* (ARM 17.8.340 and 40 CFR 60, Subpart I).
- 12. H-K shall comply with all *applicable* standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40

CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

- B. Testing Requirements
 - 1. Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up of the equipment listed in Section I.A., an EPA Methods 1-5 source test shall be performed on the asphalt plant to demonstrate compliance with Sections II.A.2 and an EPA Method 9 opacity test shall be performed in conjunction with all particulate tests to demonstrate compliance with the conditions specified in Section II.A.3 and II.A.4 (ARM 17.8.105 and ARM 17.8.749).
 - 2. An EPA Methods 1-5 and 9 source test must be performed on the asphalt plant every four (4) years after the initial source test to demonstrate compliance with the conditions specified in Section II.A.2, II.A.3, and II.A.3 (ARM 17.8.105 and ARM 17.8.749).
 - 3. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.4 (ARM 17.8.749).
 - 4. Pressure drop on the control device and temperatures must be recorded during the test and reported as part of the test results (ARM 17.8.749).
 - 5. All source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
 - 6. Since asphalt production will be limited to the average production rate during the test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
 - 7. H-K may retest at any time in order to test at a higher production rate (ARM 17.8.749).
 - 8. The Department may require further testing (ARM 17.8.105).
- C. Operational Reporting Requirements
 - 1. If this asphalt 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. H-K 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, and/or to verify compliance with permit limitations (ARM 17.8.505).

 H-K 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. H-K shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings across the dryer exhaust pollution control device for the last 12 months. The records compiled in accordance with this permit shall be maintained by H-K 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. H-K shall document, by month, the hours of operation of the facility. By the 25th day of each month, H-K shall total the monthly hours of operation of the asphalt plant during the previous 12 months. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. H-K shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

SECTION III: General Conditions

- A. Inspection H-K 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) or 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 all the terms, conditions, and matters stated herein shall be deemed accepted if H-K fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving H-K 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 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 therefor, 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 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 the Department at the location of the permitted source.
- G. Permit Fees Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by H-K 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. H-K 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 H-K Contractors, Inc. MAQP #2977-01

I. Introduction/Process Description

H-K Contractors, Inc. (H-K) owns and operates a portable hot-mix asphalt facility. A typical operation for the hot mix asphalt plant begins by loading the gravel into the hopper and then conveying it to the hot asphalt plant. The gravel is mixed with hot oil in the asphalt plant to create hot asphalt. Hot asphalt then exits the plant and is transported to the project site. A wet scrubber with an approximate 99% efficiency is used to control particulate emissions from the plant.

A. Permitted Equipment

H-K operates a portable 1993 Barber Green Drum Dryer Asphalt Plant, serial #DM70X109, a 1993 Caterpillar 820 kilowatt (kW) diesel generator along with associated equipment. Emissions from the asphalt plant are controlled by a 1985 Barber Green, Venturi Scrubber.

B. Source Description

H-K operates a portable asphalt facility at various locations throughout Montana. Permit #2977-01 applies while operating in any location throughout the State of Montana, except within those areas that have a Department of Environmental Quality (Department) approved permitting program. A Missoula County Air Quality Permit will be required for locations within Missoula County. An addendum will be required for locations in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas.

C. Permit History

On January 9, 1997, H-K Contractors, Inc. (H-K) submitted a complete application for a MAQP to operate a portable hot-mix asphalt plant. **MAQP #2977-00** was issued on February 15, 1997, to H-K.

D. Current Permit Action

During a Department review, staff discovered that MAQP #2977-00 was missing a necessary administrative rule 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 H-K accepted limits on maximum annual production in its MAQP to stay below the Title V permit threshold, the Department established such limits in the MAQP. This limit was missing the required reference of ARM 17.8.1204 which describes the Department's authority to establish limits for this purpose.

This stragety also requires that the source provide an annual certification that emissions were less than a level which would require a Title V Operating Permit which was missing from MAQP #2977-01. MAQP #2977-01 adds this rule reference and annual certification submission requirement as well as updates other rule references and permit language. **MAQP #2977-01** replaces MAQP #2977-00.

E. Additional Information

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

II. Applicable Rules and Regulations

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

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- <u>ARM 17.8.111 Circumvention</u>. (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 Monitoring
 - 2. <u>ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide</u>
 - 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. <u>ARM 17.8.213 Ambient Air Quality Standard for Ozone</u>
 - 6. <u>ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide</u>
 - 7. <u>ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter</u>
 - 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. <u>ARM 17.8.230 Fluoride in Forage</u>

H-K must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, H-K shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section

- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- <u>ARM 17.8.340 Standard of Performance for New Stationary Sources and</u> <u>Emission Guidelines for Existing Sources</u>. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). H-K is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. <u>40 CFR 60, Subpart I Standards of Performance for Hot Mix Asphalt Facilities.</u> In order for a hot mix asphalt facility 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 June 11, 1973. Based on the information submitted by H-K, the portable asphalt equipment to be used under MAQP #2977-01 is subject to this subpart because the facility is considered a hot mix asphalt facility constructed or modified after June 11, 1973.
 - c. <u>40 CFR 60, Subpart IIII Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines (CI ICE)</u>. Owners and operators of stationary 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, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Since the CI ICE to be used under MAQP #2977-01 are intended to be portable, H-K is *not* required to comply with the applicable emission limitations and operating limitations of 40 CFR 60, Subpart IIII. However, this subpart would become applicable if H-K operated them at a single location for more than 12 months.
- <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u> <u>Categories</u>. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. H-K is potentialy considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.

- b. <u>40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE)</u>. 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. H-K is considered an area source of HAP emissions. Since the RICE to be used under MAQP #2977-01 are intended to be portable, H-K is *not* required to comply with the applicable emission limitations and operating limitations of 40 CFR 63, Subpart ZZZZ. However, this subpart would become applicable if H-K operated them at a single location for more than 12 months.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

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

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit 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.

H-K has a PTE greater than 15 tons per year of total suspended particles (TSP), PM_{10} , NO_x , VOC, CO, and SO_x ; therefore, an air quality permit is required.

- 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
- 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application</u> <u>Requirements</u>. (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. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving H-K of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

- 11. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or 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. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. (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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--</u> <u>Source Applicability and Exemptions</u>. 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. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. $PTE > 70 \text{ tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.$
 - <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (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 #2977-01 for H-K, 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 PM_{10} nonattainment area.
 - d. This facility is subject to current NSPS. (40 CFR 60, Subpart I, potentially 40 CFR 60, Subpart IIII)
 - e. This facility is potentially subject to a current NESHAP (40 CFR 63, Subpart ZZZZ)
 - f. This source is not a Title IV affected source
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

H-K 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. <u>ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness</u>. The compliance certification submittal required by ARM 17.8.1204(3)(a) 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. H-K 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

	Tons per Year					
Source	TSP	PM ₁₀	NOx	VOC	СО	SOx
Asphalt Plant Drum Dryer	26.74	26.74	30	51	56	3.3
Elevator, Screens, Bins, and Mixer	200	30				
Cold Agregate Handling	100	40				
Diesel Generator (820 kW)	0.96	0.76	50.62	1.55	11.56	17.78
Haul Roads	2.74	1.23				
Total	330.44	98.73	80.62	52.55	67.56	21.08

Footnotes:

- a. Inventory reflects enforceable limits on ["production" or "hours of operation"] as requested by the facility.
- b. Inventory reflects enforceable limits on ["production" or "hours of operation"] to keep emissions below the Title V threshold of 100 tpy of any pollutant; the allowable emissions remain at or above the attainment area modeling threshold 80 tpy.

****CO** = carbon monoxide

HAPs = hazardous air pollutants hp = horsepower lb = pound N/A = not applicable ND = no data available NO_x = oxides of nitrogen PM = particulate matter PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less PM₂₅ = particulate matter with an aerodynamic diameter of 2.5 microns or less SO₂ = sulfur dioxide TPH = tons per hour TPY = tons per year TSP = total suspended solids VOC = volatile organic compounds yr = year

Calculations: Taken from MAQP #2977-00

Maximum Process Rate: Hours of operation:	500 4000	tons/hr hr/yr	(Maximum Design)
TSP Emissions			
e	lscf * 3900		(Permitting Allowable Limit) * 60 min/hr * 1 lb/7,000gr = 13.4 lbs/hr 05 tons/lb = 26.74 tons/yr
PM-10 Emissions:			
Emission Factor: Control Efficiency	0.04 gr/d		(AP-42, Section 11.1, table 11.1-5) 0 dscf/min * 60 min/hr * 1 lb/7,000gr = 13.4 lbs/hr dscf/min * 0.0005 tons/lb = 26.74 tons/yr
NOx Emissions:			
Emission Factor: Control Efficiency Calculations:	15.00 lbs	s/hr * 4000	(AP-42, Table 11.1-8) tons/hr = 15.00 lbs/hr hr/yr * 0.0005 tons/lb = 30.00 tons/yr 0 - 0.00) = 30.00 tons/yr
VOC Emissions:			
Emission Factor: Control Efficiency Calculations:	0.000.		(AP-42, Table 11.1-8) tons/hr = 25.50 lbs/hr hr/yr * 0.0005 tons/lb = 51.00 tons/yr

51.00 tons/yr * (1.00 - 0.00) = 51.00 tons/yr

	CO Emissions:		
	Emission Factor: Control Efficiency Calculations:		0.056 lbs/ton (AP-42, Table 11.1-8) 0.00% % 0.056 lbs/ton * 500 tons/hr = 28.00 lls/hr 28.00 lbs/hr * 4000 hr/yr * 0.0005 tons/lb = 56.00 tons/yr 56.00 tons/yr * (1.00 - 0.00) = 56.00 tons/yr
	SOx Emissions:		
	Emission Factor: Control Efficiency Calculations:		0.0033 lbs/ton (AP-42, Table 11.1-8) 0.00% % 0.003 lbs/ton * 500 tons/hr = 1.65 lbs/hr 1.65 lbs/hr * 4000 hr/yr * 0.0005 tons/lb = 3.30 tons/yr 3.30 tons/yr * (1.00 - 0.00) = 3.30 tons/yr
Elevator,	Screens, Bins, and Mixer		
	Process Rate: 500 Hours of operation:	tons/hr 4000	(Maximum Design) hr/yr
	TSP Emissions		
	Emission Factor: Calculations:		lbs/ton (AFSSCC 3-05-002-02, page 116, 3/90) on * 500 tons/hr = 100.0 lbs/hr s/hr * 4000 hr/yr * 0.0005 tons/lb = 200.0 tons/yr
	PM-10 Emissions:		
	Emission Factor: Calculations:		lbs/ton (AFSSCC 3-05-002-02, page 116, 3/90) /ton * 500 tons/hr = 15.00 lbs/hr s/hr * 4000 hr/yr * 0.0005 tons/lb = 30.00 tons/yr
Cold Agg	gregate Handling		
	Process Rate:500Hours of operation:4000	tons/hr hr/yr	(Maximum Design)
	TSP Emissions		
	Emission Factor: Calculations:		lbs/ton (AFSSCC 3-05-002-04, page 116, 3/90) /ton * 500 tons/hr = 50.00 lbs/hr s/hr * 4000 hr/yr * 0.0005 tons/lb = 100.00 tons/yr
	PM-10 Emissions:		
	Emission Factor: Calculations:		lbs/ton (AFSSCC 3-05-002-04, page 116, 3/90) /ton * 500 tons/hr = 20.00 lbs/hr s/hr * 4000 hr/yr * 0.0005 tons/lb = 40.00 tons/yr
Diesel Ge	enerator (820 KW)		
	Hours of operation: Number of Generators TSP Emissions	4000 1	hr/yr Generator
	Emission Factor: Calculations:	0.478 0.478 lbs	lbs/hr (AP-42, Table 3.4-5) s/hr * 4000 hr/yr * 0.0005 tons/lb = 0.96 tons/yr
	PM-10 Emissions:		
	Emission Factor: Calculations:	0.382 0.382 lbs	lbs/hr (AP-42, Table 3.4-5) s/hr * 4000 hr/yr * 0.0005 tons/lb = 0.76 tons/yr

NOx Emissions:

Emission Factor:	25.31	lbs/hr	(AP-42, Table 3.4-1)
Calculations:	25.31 lb	os/hr * 4000	hr/yr * 0.0005 tons/lb = 50.62 tons/yr

VOC Emissions:

Emission Factor:	0.777	lbs/hr	(AP-42, Table 3.4-1)
Calculations:	0.777 lb	s/hr * 4000	hr/yr * 0.0005 tons/lb = 1.55 tons/yr

CO Emissions:

Emission Factor:	5.78	lbs/hr	(AP-42, Table 3.4-1)
Calculations:	5.78 lbs/	hr * 4000 h	r/yr * 0.0005 tons/lb = 11.56 tons/yr

SOx Emissions:

Emission Factor:	8.89	lbs/hr	(AP-42, Table 3.4-1)
Calculations:	8.89 lbs/l	nr * 4000 h	r/yr * 0.0005 tons/lb = 17.78 tons/yr

Haul Roads

Vehicle miles traveled:		5	VMT/day {Estimated}
Control Efficiency:	50.0%	{Wateri	ing}

TSP Emissions:

TSP Emission Factor is based on AP-42, Section 11.2.1 TSP Emission Factor (Rated Load Capacity <50 tons): 6 Lbs/VMT

E(TSP)= (5 VMT/day) * (6 Lbs/VMT) * (1 - 0.5) = 15.00 Lbs/day or 2.74 tons/yr

PM10 Emissions:

PM10 Emission Factor is based on AP-42, Section 11.2.1 PM10 Emission Factor (Rated Load Capacity <50 tons): 2.70 Lbs/VMT

E(PM10)= (5 VMT/day) * (2.70 Lbs/VMT) * (1 - 0.50) = 6.75 Lbs/day or 1.23 tons/yr

V. Existing Air Quality

This permit is for a portable facility that may be located in various locations throughout Montana, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

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

Based on the information provided and the conditions established in MAQP #2977-01, the Department determined that there will be no impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
Х		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?
	Х	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)
	Х	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?
	Х	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?
	Х	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: 5/2/2017