



October 2, 2015

Pipestone Quarry, LLC
600 Shields Avenue
Butte, MT 59701

Dear Mr. McHugh:

Montana Air Quality Permit #2751-04 is deemed final as of October 2, 2015, by the Department of Environmental Quality (Department). All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

A handwritten signature in black ink that reads "Julie A. Merkel".

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

A handwritten signature in black ink that reads "Craig Henrikson".

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

JM:CH
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2751-04

Pipestone Quarry, LLC
600 Shields Avenue
Butte, MT 59701

October 2, 2015



MONTANA AIR QUALITY PERMIT

Issued To: Pipestone Quarry, LLC
600 Shields Avenue
Butte, MT 59701

MAQP #2751-04
Administrative Amendment (AA) Received:
8/31/2015
Department Decision on AA: 9/16/2015
Permit Final: 10/2/2015
AFS #777-2751

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Pipestone Quarry, LLC. (PQ) 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. Facility Location

PQ's portable crushing/screening facility, identified under MAQP #2751-04, applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. The facility was originally located in the Northeast $\frac{1}{4}$ of Section 20, Township 2 North, Range 5 West, in Jefferson County. *A Missoula County air quality permit will be required for all locations within Missoula County.* A list of the permitted equipment is contained in the permit analysis.

B. Current Permit Action

On August 31, 2015, the Department received a request from WGI to transfer the permit to Pipestone Quarry, LLC. WGI had also undergone a name change to URS Energy and Construction (URS), Inc. during this period so the documentation accompanying the transfer is from URS. In addition, the permit was updated to reflect the current permit language and rule references used by the Department.

Section II: Limitations and Conditions

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
4. Water and spray bars shall be available on-site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
5. PQ 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. PQ 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 and ARM 17.8.752).
7. PQ shall not operate, or have on site, more than two crushers at any given time, and the total combined maximum rated design capacity of the crushers shall not exceed 900 tons per hour (TPH) (ARM 17.8.749).
8. PQ shall not operate more than three screens at any given time and the total combined maximum rated design capacity of the screens shall not exceed 1,050 TPH (ARM 17.8.749).
9. The baghouse must be operated at all times when the crushers are in use (ARM 17.8.749).
10. The crushing facility shall not operate more than 3,400 hours during any rolling 12-month time period (ARM 17.8.749).
11. PQ shall not operate or have on-site more than two diesel engine generators. The operation of the proposed 1,500 hp diesel engine generator, and the existing 335 hp diesel engine generator shall not exceed 3,400 hours each during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by PQ, 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 time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

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 Section II.A.1 and II.A.2. Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, 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 will be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. PQ 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 PQ as a permanent business record for at least five years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
3. PQ 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).

4. PQ shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the ***addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The

notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

5. PQ 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 PQ 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).
6. PQ shall document, by month, the hours of operation of the crushing facility. By the 25th day of each month, PQ shall total the hours of operation of the facility during the previous 12 months to verify compliance with the 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).
7. PQ shall document, by month, the hours of operation of the 335 hp diesel engine generator and the 1,500 hp diesel engine generators. By the 25th day of each month, PQ shall total the hours of operation of the diesel generators for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
8. PQ 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

D. Notification

PQ shall provide the Department with written notification of the following dates within the specified time periods (ARM 17.8.749):

- Beginning actual construction of the crusher and 1,500 hp engine generator within 30 days after actual construction has begun; and
- Actual start-up date of crusher and 1,500 hp engine generator within 15 days after the actual start-up of the generating unit

Section III: General Conditions

- A. Inspection - PQ 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 PQ fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving PQ 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 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 the Department at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by PQ 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. PQ 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
Pipestone Quarry, LLC
MAQP #2751-04

Section I. Introduction/Process Description

A. Permitted Equipment

Pipestone Quarry, LLC (PQ) owns and operates the following equipment at the portable crushing/screening facility:

- Pioneer 35" x 52" Jaw Crusher (550 tons per hour (TPH)),
- Telesmith 52" Cone Crusher (350 TPH)
- five screens (350 TPH each),
- 335 horsepower (hp) diesel engine generator,
- 1,500 hp diesel engine generator,
- 1,000 gallon gasoline fuel tank,
- 12,000 gallon diesel fuel tank,
- 3,000 gallon used oil storage tank, and
- associated equipment.

In addition, a 1993 DCE Dalmatic reverse jet fabric filter controls particulate emissions from this facility.

B. Process Description

PQ proposes to use this crushing/screening plant to crush rock for railroad ballast and construction, repair, and maintenance of roads and highways. The typical operation begins by the loading of raw material into the feeder by a front-end loader or similar piece of equipment. From the feeder, the raw material is sent through a screen and crusher. From the crusher, the material is conveyed to another screen and ultimately conveyed and stockpiled for use. In addition, the oversized material from a second screen may be sent to a previously permitted crusher, screened, conveyed, and stockpiled for use. Particulate emissions from the jaw crusher are controlled with a baghouse.

C. Permit History

On January 21, 1993, **MAQP #2751-00** was issued to Conda Mining to operate a portable 1976 Pioneer 35" x 46" Jaw Crusher (450 TPH), a screen (450 TPH), a diesel generator, and associated equipment.

On August 7, 1995, **MAQP #2751-01** was issued to Conda Mining to utilize a 1993 DCE Dalmatic reverse jet fabric filter to control particulate emissions from the crusher.

On March 15, 2002, the Department of Environmental Quality (Department) received correspondence from WGI requesting to update Air Quality MAQP #2751-01 to reflect the most up to date permit language and emission factors, and to provide clarification on the size of the diesel generator used to power the crushing/screening operation. In addition, WGI requested that the permit be updated to reflect the name change from Conda Mining to WGI. **MAQP #2751-02** replaced MAQP #2751-01.

On November 12, 2014, the Department received an application from WGI to modify MAQP #2751-02 to include the addition of a 350 tph cone crusher and a 1,500 hp diesel fired engine generator to the existing portable crushing/screening operation. **MAQP #2751-03** replaced MAQP #2751-02.

D. Current Permit Action

On August 31, 2015, the Department received a request from URS (formerly WGI) to transfer the permit to Pipestone Quarry, LLC. **MAQP #2751-04** replaces MAQP #2751-03.

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.

Section II. Applicable Rules and Regulations

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

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

1. 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 emissions 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). PQ 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 which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

PQ 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, PQ 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 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). PQ 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 or 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 PQ, the portable crushing equipment to be used under MAQP #2751-04 is subject to this subpart because it meets the definition of an affected facility and was constructed or modified after August 31, 1983.
 - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). 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. Based on the information submitted by PQ, the CI ICE equipment to be used under MAQP #2751-04 is not required to comply with the applicable emission limitations and operating limitations of 40 CFR 60, Subpart IIII because it was manufactured before April 1, 2006.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. PQ is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs 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 hazardous air pollutant (HAP) emissions is a source that is not a major source. PQ is considered an area source of HAP emissions and operates RICE equipment, therefore, the engines are potentially subject to this subpart depending upon the location and nature of operation. 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 consecutive years) and operates at least 3 months each year. Based on the information submitted by PQ, the RICE equipment to be used under MAQP #2751-04 may be subject to this subpart because they are an area source of HAP emissions and the engines may remain at the same home pit location for more than 12 consecutive months.

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. PQ submitted the appropriate permit application fee for the current permit action.
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.

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 General Procedures for Air Quality Preconstruction Permitting. 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. PQ has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) and oxides of nitrogen (NO_x); therefore, an air quality permit is required.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 4. 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 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 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 PQ of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or 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 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. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because 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 non-attainment 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 #2751-04 for PQ, 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 a current NSPS (40 CFR 60, Subpart OOO).
 - e. This facility is potentially subject to a current NESHAP standards (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

PQ 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 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.

Section III. BACT Determination

A BACT determination is required for each new or modified source. Exxon Mobil shall install on the new or modified source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because the current permit action is considered an administrative permit action.

Section IV. Emission Inventory

Emission Source	tons/year						
	PM	PM10	PM2.5	NOx	CO	VOC	SO2
1500 bhp Engine Generator	1.79	1.79	1.79	61.20	14.03	1.80	20.63
335 bhp Generator Engine	1.25	1.25	1.25	17.65	3.80	1.43	1.17
1976 Pioneer Jaw crusher (550 TPH) (controlled)	0.06	0.03	0.00				
2013 Telsmith Cone Crusher (350 TPH) (controlled)	0.04	0.02	0.00				
Screens (350 TPH) (3)	3.93	1.73	0.05				
Haul Roads	4.41	1.22	0.12				
Conveyor Transfer Points (12) (350 TPH)	1.00	0.33	0.09				
Pile Forming	4.03	1.91	0.29				
Bulk Loading	0.06	0.06	0.06				
1,000 gallon gasoline fuel tank	-	-	-				
12,000 gallon diesel fuel tank	-	-	-				
3, 000 gallon used oil storage tank	-	-	-				
Total Emissions	16.56	8.32	3.66	78.85	17.83	3.23	21.80
Assuming	3,400 hr/yr operation						

1500 bhp Engine Generator

Operational Capacity of Engine = 1,500.00 hp

generator = 1,360.00 kw

Hours of Operation = 3,400 hours/yr

PM Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

PM10 Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

PM2.5 Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

NOx Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 2.40E-02 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0240 lbs/hp-hr) * (ton/2000 lb) = **61.20** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0240 lbs/hp-hr) = **122,400.00** lbs/yr

CO Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 5.50E-03 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00550 lbs/hp-hr) * (ton/2000 lb) = **14.03** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00550 lbs/hp-hr) = **28,050.00** lbs/yr

VOC Emissions: Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) = 7.05E-04 lbs/hp-hr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00071 lbs/hp-hr) * (ton/2000 lb) = **1.80** ton/yr
 Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00071 lbs/hp-hr) = **3,595.50** lbs/yr

SOx Emissions: Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	8.09E-03	lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00809 lbs/hp-hr) * (ton/2000 lb) =	1.80	ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00809 lbs/hp-hr) =	3,595.50	lbs/yr

335 bhp Generator Engine

Operational Capacity of Engine = 335 hp	335	hp/250 kW
Hours of Operation = 3,400 hours/yr	3,400	hours/yr

PM Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

PM-10 Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

PM-2.5 Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

NOx Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	3.10E-02	lbs/hp-hr
Calculation: (35,309.00 lbs/yr) * (ton/2000 lb) =	17.65	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.03 lbs/hp-hr) =	35,309.00	lbs/yr

CO Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	6.68E-03	lbs/hp-hr
Calculation: (7,608.52 lbs/yr) * (ton/2000 lb) =	3.80	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0067 lbs/hp-hr) =	7,608.52	lbs/yr

VOC Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.51E-03	lbs/hp-hr
Calculation: (2,863.56 lbs/yr) * (ton/2000 lb) =	1.43	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0025 lbs/hp-hr) =	2,863.56	lbs/yr

SOx Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.05E-03	lbs/hp-hr
Calculation: (2,334.95 lbs/yr) * (ton/2000 lb) =	1.17	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0021 lbs/hp-hr) =	2,334.95	lbs/yr

1976 Pioneer Jaw crusher (550 TPH) (controlled)

Hours of Operation	3,400	hrs/yr
Process Rate	550	ton/hr

PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0012	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.12 ton/yr	1.12	ton/yr
Baghouse control @ 95%	0.06	ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.00054	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 0.50 ton/yr	0.50	ton/yr
Baghouse control @ 95%	0.03	ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0001	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =	0.50	ton/yr
Baghouse control @ 95%	0.03	ton/yr

2013 TelSmith Cone Crusher 350 TPH (controlled)

Hours of Operation	3,400	hrs/yr
Process Rate	350	ton/hr

PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0012	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) =		
0.71 ton/yr	0.71	ton/yr
Baghouse control @ 95%	0.04	ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.00054	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =		
0.32 ton/yr	0.32	ton/yr
Baghouse control @ 95%	0.02	ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0001	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) =		
0.06 ton/yr	0.06	ton/yr
Baghouse control @ 95%	0.00	ton/yr

Screens (350 TPH) (3)

Hours of Operation	3,400	hrs/yr
Number of Screens	3	screens
Process Rate	350	ton/hr

Total PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.0022	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.0022 lb/ton) * (ton/2000 lb) =	3.47	ton/yr

Total PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00074	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.00074 lb/ton) * (ton/2000 lb) =	1.35	ton/yr

Total PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00005	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.00005 lb/ton) * (ton/2000 lb) =	0.04	ton/yr

Conveyor Transfer Points (12)

Process Rate	350	ton/hr
Hours of Operation	3,400	hrs/yr
Number of Transfers	12	transfer

Total PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00014	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (12 transfer) =	1.00	ton/yr

Total PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04) 4.60E-05 lb/ton
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (12 transfer) = **0.33** ton/yr

Total PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04) 1.30E-05 lb/ton
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (12 transfer) = **0.09** ton/yr

Pile Forming

Process Rate 350 ton/hr
 Hours of Operation 3,400 hrs/yr
 Number of Piles 4 piles

PM Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00169 lb/ton
 Where: k = particle size multiplier 0.74
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00169 lb/ton) * (ton/2000 lb) * (4 piles) = 3.56 ton/yr

PM₁₀ Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00080 lb/ton
 Where: k = particle size multiplier 0.35
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00080) * (ton/2000 lb) * (4 piles) * (1-0/100)= **1.68** ton/yr

PM_{2.5} Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00012 lb/ton
 Where: k = particle size multiplier 0.053
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00012 lb/ton) * (ton/2000 lb) * (4 piles) = 0.25 ton/yr

Bulk Loading

Process Rate 350 ton/hr
 Hours of Operation 3,400 hrs/yr
 Number of Loads 1 load

PM Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
Control Efficiency 0 %
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

Section V. Existing Air Quality

This permit is for a portable facility to be initially located in the Northeast ¼ of Section 20, Township 2 North, Range 5 West, in Jefferson County, Montana. Richland County, and 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.

Section VI Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and of limited duration.

Section VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #2751-04, the Department determined that the impact from this permitting action will be minor.

Section 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?
	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)

Section 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: Craig Henrikson

Date: 09/15/2015