



November 13, 2015

Jennifer Rather
Kenyon Noble Ready-Mix
P.O. Box 1387
Bozeman, MT 59771-1387

Dear Ms. Rather:

Montana Air Quality Permit #2715-04 is deemed final as of November 13, 2015, by the Department of Environmental Quality (Department). This permit is for a portable non-metallic mineral processing plant. 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
Air Permitting Supervisor
Air Quality Bureau
(406) 444-3626

A handwritten signature in black ink that reads "John P. Proulx".

John P. Proulx
Environmental Science Specialist
Air Quality Bureau
(406) 444-1277

JM:JP
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2715-04

Kenyon Noble Ready-Mix
P.O. Box 1387
Bozeman, MT 59771-1387

November 13, 2015



MONTANA AIR QUALITY PERMIT

Issued To: Kenyon Noble Ready-Mix
P.O. Box 1387
Bozeman, MT 59771-1387

MAQP: #2715-04
Administrative Amendment (AA)
Request Received: 10/23/2015
Department Decision on AA: 10/28/2015
Permit Final: 11/13/15
AFS: #777-2715

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Kenyon Noble Ready-Mix (Kenyon) 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

Kenyon operates a portable non-metallic mineral processing plant initially located in Southwest ¼ of the Southwest ¼ of Section 23, Township 1 South, Range 4 East, in Gallatin County, Montana. However, MAQP #2715-04 applies while operating at any location in Montana, except those areas having a Montana Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On October 23, 2015, the Department received a request from Kenyon Noble Ready-Mix, to change the name from Portable Sand and Gravel, Inc., to the current legal name of Kenyon Noble Ready-Mix and to update contact information.

Section II: Conditions and Limitations

A. Emission Limitations

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

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over 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. Kenyon 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).
6. Kenyon 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. Kenyon shall not operate more than two (2) crushers at any given time and the maximum rated design capacity of the crushers shall not exceed 590 tons per hour (TPH) (ARM 17.8.749).
8. Kenyon shall not operate more than one (1) screen at any given time and the maximum rated design capacity of the screen shall not exceed 250 TPH (ARM 17.8.749).
9. If the permitted equipment is used in conjunction with any other equipment owned or operated by Kenyon, 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).
10. Kenyon shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this 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 Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Kenyon shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained the permit analysis.

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

3. Kenyon 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. Kenyon 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 Kenyon as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).

Section III: General Conditions

- A. Inspection – Kenyon shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Kenyon fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Kenyon of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Kenyon 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. Kenyon 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
Kenyon Noble Ready-Mix
MAQP #2715-04

I. Introduction/Process Description

Kenyon Noble Ready-Mix (Kenyon) owns and operates a portable non-metallic mineral processing plant with a maximum rated design capacity of 590 tons per hour (TPH) crushing production and 250 TPH screening production.

A. Permitted Equipment

The following list of permitted equipment is based on information provided within the initial application and is provided for reference. MAQP #2715 is de minimis friendly, whereby operational flexibility is allowed and alternate equipment may be utilized as long as maximum capacities are not exceeded. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action consists of the following;

- 1989 Torgerson Horizontal Shaft Impact Crusher [250 TPH]
- 1998 Cedar Rapids Jaw Crusher [340 TPH]
- 1999 JCI 6'x20' 3-Deck Screen [250 TPH]
- 1995 Westec Wash Plant [180 TPH]
- Associated material handling equipment - (6) transfer conveyors, (3) field conveyors, and (1) stacking conveyor

B. Source Description

Kenyon will utilize this portable wash plant to wash and sort sand and small diameter materials for use in various construction projects. For a typical operational setup, unprocessed materials are loaded into the feed hopper where the materials are then fed into the water filled reservoir where a bucket wheel provides agitation to remove silts, slimes, and clays from saleable sand. A fines screen and centrifugal action is employed to separate materials. Sand exiting the system is stockpiled while undesirable material is entrained in wash water and discharged to a settling pond.

The home pit location of this mineral processing operation is located at the Southwest ¼ of the Southwest ¼ of Section 23, Township 1 South, Range 4 East, in Gallatin County, Montana.

C. Permit History

Portable Inc. was issued **MAQP #2715-00** on October 6, 1992, for the operation of a portable 1989 Torgerson Horizontal Shaft Impactor crusher (maximum capacity 250 TPH) and associated equipment including a feeder (maximum capacity 250 TPH); six transfer conveyors; three field conveyors; a stacking conveyor; and a 74 kW generator.

On August 11, 1995, **MAQP #2715-01** was issued to Portable Inc. to change the serial number of the Torgerson crusher (from BX-108 to MCX-135).

On August 8, 2002, Portable Inc. was issued a permit alteration for the addition of a JCI 16x20, 3 deck, screening plant. **MAQP #2715-02** replaced MAQP #2715-01.

On November 30, 2011, the Department of Environmental Quality (Department) received a request from Portable Inc. that MAQP #2715-02 be amended in order to be consolidated with MAQP #3132-00, as the equipment associated with these sources do not operate independently and outside of the designated location. The permit action was an administrative amendment to incorporate the separate equipment into a single MAQP. In addition this permit action updated the permit to the current permit language and rule references used by the Department. **MAQP#2715-03** replaced MAQP #2715-02

D. Current Permit Action

On October 23, 2015, the Department received a request from Kenyon Noble Ready-Mix to change the name from Portable Inc., to the current legal name of Kenyon Noble Ready-Mix and to update contact information. The current permit action reflects this change and updates the permit language to reflect current permit language and references. **MAQP#2715-04** replaces MAQP#2715-03.

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.

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests (emission or ambient) for such periods of time as may be necessary, using methods approved by the Department.

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

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

4. ARM 17.8.110 Malfunctions. 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. 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. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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 (CO)
5. ARM 17.8.213 Ambient Air Quality Standards 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 (PM)
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standards for Lead
10. ARM 17.8.223 Ambient Air Quality Standards for Particulate Matter with an Aerodynamic Diameter of 10 microns or less (PM₁₀)

Kenyon must comply with the appropriate 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 to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, emissions 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 20% for all fugitive emissions and that reasonable precautions be taken to control airborne particulate matter. (2) Under this rule, Kenyon shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emission of airborne particulate matter.
3. ARM 17.8.310 Particulate Matter, Industrial Processes. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
4. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Kenyon 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 Kenyon, the portable crushing equipment to be used under MAQP #2705-04 is subject to this subpart as it meets the definition of an affected facility constructed after August 31, 1983.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an 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 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year (tpy) of any pollutant. Kenyon has a PTE greater than 15 tpy of PM, PM₁₀; 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. The current permit action is considered an administrative amendment; therefore, a permit application was not required. (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. The current permit action is an administrative amendment, and therefore, did not require publication.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Kenyon 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 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those 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 Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have the potential to emit more than 250 tpy or more of any air pollutant.

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. Potential To Emit (PTE) > 100 tpy of any pollutant;
 - b. PTE > 10 tpy of any single hazardous air pollutant (HAP), PTE > 25 tpy of combined HAPs, or a lesser quantity as the Department may establish by rule; or
 - c. Sources with the PTE > 70 tpy of PM₁₀ in a serious PM₁₀ non-attainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2715-03 for Kenyon, the following conclusions were made:
 - a. The facility's PTE is less than 100 tpy for all criteria pollutants.
 - b. The facility's PTE is less than 10 tpy of any single HAP and less than 25 tpy of combined 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 A, Subpart OOO).
 - e. This facility is not subject to any current NESHAP standards.

- f. This source is not a Title IV affected source nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Kenyon will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Kenyon will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

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

IV. Emission Inventory

| Emission Source | Emissions Tons/Year [PTE] | | | | | | |
|---|---------------------------|------------------|-------------------|-------------|-----------------|-----------------|-------------|
| | PM | PM ₁₀ | PM _{2.5} | CO | NO _x | SO ₂ | VOC |
| Torgerson Impact Crusher [250 TPH] | 1.31 | 0.59 | 0.11 | -- | -- | -- | -- |
| Cedar Rapids Jaw Crusher [340 TPH] | 1.79 | 0.80 | 0.15 | -- | -- | -- | -- |
| JCL 3-Deck Screen [250 TPH] | 2.41 | 0.81 | 0.05 | -- | -- | -- | -- |
| Material Handling | 41.99 | 19.81 | 3.43 | -- | -- | -- | -- |
| Unpaved Roadways (Haul Roads) | 10.98 | 3.03 | 0.30 | -- | -- | -- | -- |
| TOTAL EMISSIONS ► | 58.49 | 25.05 | 4.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| CO, carbon monoxide lbs, pounds NO _x , oxides of nitrogen PM, particulate matter PM ₁₀ , particulate matter with an aerodynamic diameter of 10 microns or less PM _{2.5} , particulate matter with an aerodynamic diameter of 2.5 microns or less [Sum of condensable and filterable] SO ₂ , sulfur dioxide TPH, tons per hour TPY, tons per year VOC, volatile organic compounds | | | | | | | |

Portable Crushing & Screening Plant

Production

Rate:

| | | |
|----------|---------------|-----------------------------|
| | tons/hour | |
| Crushers | 590 (Maximum) | 5168400 tons/year (Maximum) |

| | | |
|---------|---------------|-----------------------------|
| | tons/hour | |
| Screens | 250 (Maximum) | 2190000 tons/year (Maximum) |

Power

Plant: Electric Utility Land Line

Material Processing:

Torgerson Impact Crusher [SCC 3-05-030-03]

Process Rate: 250 tons/hour

Operating

Hours: 8760 hours/year

Particulate Emissions:

PM Emissions (controlled):

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.0012 8/04] | |
| | (0.0012 lbs/ton) * (250 | |
| Calculations | tons/hr) = | 0.30 lbs/hr |
| | (0.3 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) | |
| | = | 1.31 TPY |

PM₁₀ Emissions

(controlled):

| | | |
|-----------------|--|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00054 8/04] | |
| | (0.00054 lbs/ton) * (250 | |
| Calculations | tons/hr) = | 0.14 lbs/hr |
| | (0.135 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.59 TPY |

PM_{2.5} Emissions

(controlled):

| | | |
|-----------------|--|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.0001 8/04] | |
| | (0.0001 lbs/ton) * (250 | |
| Calculations | tons/hr) = | 0.03 lbs/hr |
| | (0.025 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.11 TPY |

Cedar Rapids Jaw Crusher [SCC 3-05-030-03]

Process Rate: 340 tons/hour
Operating
Hours: 8760 hours/year

Particulate Emissions:

PM Emissions (controlled):

| | | |
|-----------------|--|-------------------------|
| Emission Factor | lbs/ton processed 0.0012 8/04] | [AP-42 Table 11.19.2-2, |
| Calculations | (0.0012 lbs/ton) * (250 tons/hr) = | 0.41 lbs/hr |
| | (0.408 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = | 1.79 TPY |

PM₁₀ Emissions
(controlled):

| | | |
|-----------------|---|-------------------------|
| Emission Factor | lbs/ton processed 0.00054 8/04] | [AP-42 Table 11.19.2-2, |
| Calculations | (0.00054 lbs/ton) * (250 tons/hr) = | 0.18 lbs/hr |
| | (0.1836 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = | 0.80 TPY |

PM_{2.5} Emissions
(controlled):

| | | |
|-----------------|--|-------------------------|
| Emission Factor | lbs/ton processed 0.0001 8/04] | [AP-42 Table 11.19.2-2, |
| Calculations | (0.0001 lbs/ton) * (250 tons/hr) = | 0.03 lbs/hr |
| | (0.034 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = | 0.15 TPY |

JCI Deck Screen [SCC 3-05-020-02,03]

Process Rate: 250 tons/hour
Operating
Hours: 8760 hours/year

Particulate Emissions:

PM Emissions (controlled):

| | | |
|-----------------|---|-------------------------|
| Emission Factor | lbs/ton processed 0.0022 8/04] | [AP-42 Table 11.19.2-2, |
| Calculations | (0.0022 lbs/ton) * (250 tons/hr) = | 0.55 lbs/hr |
| | (0.55 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = | 2.41 TPY |

PM₁₀ Emissions
(controlled):

| | | |
|-----------------|--|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00074 8/04] | |
| | (0.00074 lbs/ton) * (250 | |
| Calculations | tons/hr) = | 0.19 lbs/hr |
| | (0.185 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.81 TPY |

PM_{2.5} Emissions
(controlled):

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00005 8/04] | |
| | (0.00005 lbs/ton) * (250 | |
| Calculations | tons/hr) = | 0.01 lbs/hr |
| | (0.0125 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.05 TPY |

**Material
Handling:**

Fragmented Stone Load-In ► Crusher [SCC 3-05-020-31]

Process Rate: 590 tons/hour [Crusher Capacity]
Operating
Hours: 8760 hours/year

Particulate Emissions:

PM Emissions:

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00016 8/04] | |
| | (0.00016 lbs/ton) * (590 | |
| Calculations | tons/hr) = | 0.09 lbs/hr |
| | (0.0944 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.41 TPY |

PM₁₀ Emissions:

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00016 8/04] | |
| | (0.00016 lbs/ton) * (590 | |
| Calculations | tons/hr) = | 0.09 lbs/hr |
| | (0.0944 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.41 TPY |

PM_{2.5}

Emissions:

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00016 8/04] | |
| | (0.00016 lbs/ton) * (590 | |
| Calculations | tons/hr) = | 0.09 lbs/hr |
| | (0.0944 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.41 TPY |

Conveyor Transfer Points [SCC 3-05-020-06]

| | |
|---------------|----------------------------------|
| | tons/hour [Maximum Conveyor |
| Process Rate: | 300 Capacity] |
| Operating | |
| Hours: | 8760 hours/year |
| Total | Transfers [Based on Process Flow |
| Transfers: | 10 Diagram] |

Particulate Emissions:

PM Emissions (controlled):

| | | |
|-----------------|---|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.00014 8/04] | |
| | (0.00014 lbs/ton) * (300 tons/hr) * (10 | |
| Calculations | Transfers) = | 0.42 lbs/hr |
| | (0.42 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 1.84 TPY |

PM₁₀ Emissions
(controlled):

| | | |
|-----------------|--|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.000046 8/04] | |
| | (0.000046 lbs/ton) * (300 tons/hr) * (10 | |
| Calculations | Transfers) = | 0.14 lbs/hr |
| | (0.138 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.60 TPY |

PM_{2.5}

Emissions(controlled):

| | | |
|-----------------|--|-------------------------|
| | lbs/ton processed | [AP-42 Table 11.19.2-2, |
| Emission Factor | 0.000013 8/04] | |
| | (0.000013 lbs/ton) * (300 tons/hr) * (10 | |
| Calculations | Transfers) = | 0.04 lbs/hr |
| | (0.039 lbs/hr) * (8760 hrs/yr) * (0.0005 | |
| | tons/lb) = | 0.17 TPY |

Storage Pile Load-In & Load-Out

| | |
|---------------|----------------------------------|
| Process Rate: | 590 tons/hour [Crusher Capacity] |
| Operating | |
| Hours: | 8760 hours/year |

2 Crushers: Initial Pile Formation → Pile Load-Out to
 Pile Transfers: 4 Trucks]

Particulate Emissions:

Emission Factor $EF = k (0.0032) * [(U/5)^{1.3} / (M / 2)^{1.4}]$ [AP-42 13.2.4, 11/06]

where: EF, Emission Factor = lbs Emitted / ton Processed

k, Dimensionless Particle Size Multiplier PM = 0.74 [AP-42 13.2.4, 11/06]

k, Dimensionless Particle Size Multiplier PM₁₀ = 0.35 [AP-42 13.2.4, 11/06]

k, Dimensionless Particle Size Multiplier PM_{2.5} = 0.053 [AP-42 13.2.4, 11/06]

U, Mean Wind Speed (mph) = 9.33 [ASOS/AWOS - MT 10 yr Ave.]

M, Material Moisture Content (%) = 2.53 [AP-42 13.2.4.3, 11/06]

PM Emissions:

Emission Factor $EF = 0.74 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$ 0.0038 lbs/ton

Calculations $(0.0038 \text{ lbs/ton}) * (590 \text{ tons/hr}) * (4 \text{ pile transfers}) =$ 9.07 lbs/hr

$(9.07 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$ 39.74 TPY

PM₁₀ Emissions:

Emission Factor $EF = 0.35 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$ 0.0018 lbs/ton

Calculations $(0.0018 \text{ lbs/ton}) * (590 \text{ tons/hr}) * (4 \text{ piles}) =$ 4.29 lbs/hr

$(4.29 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$ 18.80 TPY

PM_{2.5} Emissions:

Emission Factor $EF = 0.053 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$ 0.0003 lbs/ton

Calculations $(0.0003 \text{ lbs/ton}) * (590 \text{ tons/hr}) * (4 \text{ piles}) =$ 0.65 lbs/hr

$(0.65 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$ 2.85 TPY

Unpaved Roadways (Haul Roads)

Miles Travelled: 5 Miles/Day [Estimate]
 Vehicle <
 Weight: 50 Tons

| | | |
|-----------------|--|------------------------------------|
| Emission Factor | $EF = k(s/12)^a * (W/3)^b$ | [AP-42 13.2.2.2, 11/06] |
| | where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT) | |
| | k, Empirical Constant PM | |
| | = | 4.9 [AP-42 Table 13.2.2-2, 11/06] |
| | k, Empirical Constant PM ₁₀ | |
| | = | 1.5 [AP-42 Table 13.2.2-2, 11/06] |
| | k, Empirical Constant PM _{2.5} | |
| | = | 0.15 [AP-42 Table 13.2.2-2, 11/06] |
| | s, Surface Material Silt Content (%) | |
| | = | 7.1 [AP-42 Table 13.2.2-1, 11/06] |
| | W, Mean Vehicle Weight (tons) | |
| | = | 50 [Provided Data] |
| | a, Empirical Constant PM | |
| | = | 0.7 [AP-42 Table 13.2.2-2, 11/06] |
| | a, Empirical Constant PM ₁₀ / PM _{2.5} | |
| | = | 0.9 [AP-42 Table 13.2.2-2, 11/06] |
| | b, Empirical Constant PM - PM _{2.5} | |
| | = | 0.45 [AP-42 Table 13.2.2-2, 11/06] |

PM Emissions:

| | | |
|-----------------|--|---------------|
| Emission Factor | $EF = 4.9 * (7.1/12)^{0.7} * (50/3)^{0.45}$ | 12.04 lbs/VMT |
| Calculations | (12.04 lbs/VMT) * (5 miles/day) | 60.18 lbs/day |
| | (60.18 lbs/day) * (365 days/yr) * (0.0005 tons/lb) | 10.98 TPY |

PM₁₀ Emissions:

| | | |
|-----------------|--|---------------|
| Emission Factor | $EF = 1.5 * (7.1/12)^{0.9} * (50/3)^{0.45}$ | 3.32 lbs/VMT |
| Calculations | (3.32 lbs/VMT) * (5 miles/day) | 16.59 lbs/day |
| | (16.59 lbs/day) * (365 days/yr) * (0.0005 tons/lb) | 3.03 TPY |

PM₁₀ Emissions:

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

V. Existing Air Quality and Impacts

MAQP #2715-04 is issued for the operation of a portable crushing/screening plant to be originally located in the SW ¼ of the SW ¼ of Section 23, Township 1 South, Range 4 East, in Gallatin County, Montana. MAQP #2715-04 will cover the operation when operating at

any location in Montana, excluding those counties that have a Department approved permitting program. The initial location and those areas for which this facility is permitted to operate under MAQP #2715-04 have been designated unclassified/attainment with all ambient air quality standards and there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Air quality impacts are expected to be minor.

VII. Ambient Air Impact Analysis

The Department determined that there will be no impacts from the current permit action, as it is an administrative amendment. Therefore, the Department believes this action 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 | |
|-----|----|---|
| 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) |

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: October 26, 2015