Montana Department of
ENVIRONMENTAL QUALITY

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August 26, 2013

Bonnie Kostelecky
Fisher Sand & Gravel Co.
P.O. Box 1034
Dickinson, ND 58602-1034

Dear Ms. Kostelecky:

Montana Air Quality Permit #2916-01 is deemed final as of August 24, 2013, by the Department of Environmental Quality (Department). This permit is for a non-metallic mineral processing plant and associated equipment. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A Merkel

Julie Merkel
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3626

Doug Kuenzli
Environmental Science Specialist
Air Resources Management Bureau
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JM:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2916-01

Fisher Sand & Gravel Co.
P.O. Box 1034
Dickinson, ND 58602-1034

August 24, 2013

MONTANA AIR QUALITY PERMIT

Issued To: Fisher Sand & Gravel Co.
P.O. Box 1034
Dickinson, ND 58602-1034

MAQP: #2916-01
Administrative Amendment (AA)
Request Received: 06/12/2013
Department's Decision on AA: 08/02/2013
Permit Final: 08/24/2013
AFS#: 777-2916

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

Section I: Permitted Facilities

A. Plant Location

Fisher owns and operates a portable non-metallic mineral processing plant. MAQP #2916-01 applies while operating at any location in Montana, except within 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) or certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Fisher intends to locate in or within 10 km of certain PM_{10} nonattainment areas. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

At the request of Fisher the current permit action is an administrative amendment to update the language and rule references used by the Department and to incorporate de minimis friendly language specific to equipment conditions and limitations.

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 a consecutive minutes (ARM 17.8.340 and 40 Code of Federal Regulations (CFR) Part 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) for which requirements of 40 CFR 60 Subpart OOO are applicable 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 water 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. Fisher 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. Fisher shall treat all unpaved portions of the haul roads, access roads, parking lots, or 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. Fisher shall not operate more than one (1) crusher at any given time and the combined maximum rated design capacity of the crusher(s) shall not exceed 500 tons per hour (TPH) (ARM 17.8.749).

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

9. Fisher shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in 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 portable crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Fisher 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 most recent emission inventory report and sources identified in the permit analysis.

3. 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 units as 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. Fisher 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 emission unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

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

Section III: General Conditions

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

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Fisher of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement 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 Fisher. 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. Fisher shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department-approved permitting program or areas considered tribal areas.

Montana Air Quality Permit (MAQP) Analysis
Fisher Sand and Gravel Company
MAQP #2916-01

I. Introduction/Process Description

Fisher Sand and Gravel Company (Fisher) owns and operates a portable non-metallic mineral processing plant.

A. Permitted Equipment

The following list of permitted equipment is based on the most recent permit application and is provided for reference, as portions of MAQP #2916-01 are written de minimis friendly, whereby operational flexibility is provided so that alternate equipment may be utilized given that maximum permitted capacities are not exceeded. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action includes, but is not limited to the following:

- Vertical Impact Crusher [500 tons per hour (TPH)]
- Associated equipment, such as; feeders, conveyors (including integrated equipment conveyors), stackers, and other material handling equipment.

B. Source Description

The crushing/screening plant is used to crush and sort gravel/sand materials for use in various construction activities. For a typical operational setup, the raw materials will initially be sent through a primary crusher and then through a series of secondary crushers and/or screens for sorting or processing to the desire dimension and, ultimately, to a stockpile for use in construction operations. Any secondary crushers or screens operated in conjunction with the crusher permitted under MAQP #2916-01 would be covered under a separate air quality permit.

Electricity to power this source is provided through utility line power or through operation of generator set(s) regulated under a separate air quality permit.

Fisher does not maintain a home-pit location within the State of Montana.

C. Permit History

MAQP #2916-00 was issued final on April 10, 1996 for the operation of a portable Model 84 impact crusher.

D. Current Permit Action

At the request of Fisher the current permit action is an administrative amendment to update the language and rule referenced used by the Department and to incorporate de minimis friendly language specific to equipment conditions and limitations. **MAQP #2916-01** will replace MAQP #2916-00.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

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

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

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

   Fisher 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. (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 that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide (SO_2)
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide (NO_2)
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
5. ARM 17.8.213 Ambient Air Quality Standards for Ozone (O_3)
6. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter (PM)
7. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM_{10})

Fisher 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 are taken to control emissions of airborne particulate matter. (2) Under this rule, Fisher 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 rule.

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 rule.

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 rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Fisher the portable crushing/screening operation and associated equipment are applicable to NSPS (40 CFR 60), as follows:

   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 Fisher, the portable crushing equipment to be used under MAQP #2916-01 is subject to this subpart as it meets the definition of an affected facility constructed after August 31, 1983.

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. Based on the information submitted by Fisher, this plant is not applicable to any current NESHAP requirements.

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. No permit application was required as the current permit action is an administrative amendment.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

   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. Fisher has a PTE greater than 15 tpy of PM; 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 permit application for the current permit action. (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. Administrative amendments do not require the applicant Fisher to notify the public.

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 Fisher 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 air quality permit 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 tpy of any air 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 tpy of any pollutant;

b. PTE > 10 tpy of any single HAP, PTE > 25 tpy of combined HAPs, or a lesser quantity as the Department may establish by rule; or

c. PTE > 70 tpy of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2916-01 for Fisher, the following conclusions were made:

a. The facility's PTE is less than 100 tpy for any pollutant.

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 PM_{10} nonattainment area.

d. This facility is subject to current NSPS (40 CFR 60, Subpart OOO).

e. This facility is not subject to current NESHAP.

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.

Based on these facts, the Department has determined that Fisher 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, Fisher will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

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

IV. Emission Inventory

	Emissions Tons/Year [PTE] [a]							
Emission Source	PM	PM_{10}	$PM_{2.5}$	PM_{cond}	CO	NOx	SO_2	VOC
Aggregate Crushers	2.63	1.18	0.22	--	--	--	--	--
Material Handling	11.89	5.49	0.88	--	--	--	--	--
Unpaved Roadways (Haul Roads)	5.49	1.51	0.15	--	--	--	--	--
TOTAL EMISSIONS ►	20.01	8.19	1.25	0.00	0.00	0.00	0.00	0.00

ASOS, Automated Surface Observing System	PTE, Potential To Emit
AWOS, Automated Weather Observing System	PM, particulate matter
BSFC, brake specific fuel consumption	PM_{COND}, condensable particulate matter
bhp, brake-horsepower	PM_{10}, particulate matter with an aerodynamic diameter of 10 microns or less
Btu, British Thermal Units	$PM_{2.5}$, particulate matter with an aerodynamic diameter of 2.5 microns or less [Sum of condensable and filterable]
CO, carbon monoxide	SCC, Source Classification Code
EF, emission factor	SO_2, sulfur dioxide
hr, hour	TPH, tons per hour
lbs, pounds	TPY, tons per year
MM, million	VMT, vehicle miles travelled
mph, miles per hour	VOC, volatile organic compounds
NO_X, oxides of nitrogen	

Non-Metallic Mineral Processing Plant

Production Rate:
Crushers (1) 500 tons/hour (Maximum) 4,380,000 tons/year
Allowable Hours of Operation: 8760 hours/year [Material Processing]

Power Source: Generator set engine(s) or Utility provided line power

Material Processing:

Aggregate Crushers [SCC 3-05-020-01]

Process Rate: 500 tons/hour
Operating Hours: 8760 hours/year

Particulate Emissions (controlled):

PM Emissions:

Emission Factor 0.0012 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]

Calculations	(0.0012 lbs/ton) * (500 tons/hr) =	0.60 lbs/hr
	(0.6 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	2.63 TPY

PM_{10} Emissions:

Emission Factor	0.00054 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.00054 lbs/ton) * (500 tons/hr) =	0.27 lbs/hr
	(0.27 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	1.18 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.00010 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.0001 lbs/ton) * (500 tons/hr) =	0.05 lbs/hr
	(0.05 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.22 TPY

Material Handling:

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

Process Rate: 500 tons/hour [Crusher Capacity]
Operating Hours: 8760 hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor	0.000031 lbs/ton [PM = PM_{10}/0.51 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]	
Calculations	(0.000031 lbs/ton) * (500 tons/hr) =	0.02 lbs/hr
	(0.0155 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.07 TPY

PM_{10} Emissions:

Emission Factor	0.000016 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.000016 lbs/ton) * (500 tons/hr) =	0.01 lbs/hr
	(0.008 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.04 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.000005 lbs/ton [$PM_{2.5}$ = PM*0.15 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]	
Calculations	(0.000005 lbs/ton) * (500 tons/hr) =	0.00 lbs/hr
	(0.002325 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.01 TPY

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

Process Rate: 500 tons/hour [Maximum Facility Capacity]
Operating Hours: 8760 hours/year
Total Transfers: 3 Transfers [Worst-Case Based On Equipment Available]

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.00014 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.00014 lbs/ton) * (500 tons/hr) * (3 Transfers) =	0.21 lbs/hr
	(0.21 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.92 TPY

PM_{10} Emissions:

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

Calculations	(0.000046 lbs/ton) * (500 tons/hr) * (3 Transfers) =	0.07 lbs/hr
	(0.069 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.30 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.000013 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.000013 lbs/ton) * (500 tons/hr) * (3 Transfers) =	0.02 lbs/hr
	(0.020 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.09 TPY

Storage Pile Formation [SCC 30502505 / 30502502]

Process Rate: 500 tons/hour [Maximum Facility Capacity]
Operating Hours: 8760 hours/year
Pile Transfers: 1 [Initial Pile Formation]

Particulate Emissions (controlled):

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

k, Dimensionless Particle Size Multiplier PM =	0.74	[AP-42 13.2.4, 11/06]
k, Dimensionless Particle Size Multiplier PM_{10} =	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) =	9.3	[ASOS/AWOS AVE-MT 10 yr Ave.]
M, Material Moisture Content (%) =	2.10	[AP-42 13.2.4.1, 11/06]

PM Emissions:

Emission Factor	EF = 0.74 * (0.0032) * [(9.33/5)^1.3 / (2.1/ 2)^1.4] =	0.0050 lbs/ton
Calculations	(0.0050 lbs/ton) * (500 tons/hr) * (1 pile transfers) =	2.49 lbs/hr
	(2.49 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) =	10.90 TPY

PM_{10} Emissions:

Emission Factor	EF = 0.35 * (0.0032) * [(9.33/5)^1.3 / (2.1/ 2)^1.4] =	0.0024 lbs/ton
Calculations	(0.0024 lbs/ton) * (500 tons/hr) * (1 piles) =	1.18 lbs/hr
	(1.18 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) =	5.15 TPY

$PM_{2.5}$ Emissions:

Emission Factor	EF = 0.053 * (0.0032) * [(9.33/5)^1.3 / (2.1/ 2)^1.4] =	0.00036 lbs/ton
Calculations	(0.0004 lbs/ton) * (500 tons/hr) * (1 piles) =	0.18 lbs/hr
	(0.18 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) =	0.78 TPY

Unpaved Roadways (Haul Roads) - Secondary Emissions

Miles Travelled: 5 Miles/Day [Estimate]
Vehicle Weight: 50 Tons [Mean Vehicle Weight Empty/Full]
Control Method: Water Application
Control Efficiency(C_e): 50%

Particulate Emissions (controlled):

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	[Applicant 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) * (1 - 0.5 Ce) =			30.09 lbs/day
	(30.09 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			5.49 TPY

PM_{10} 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) * (1 - 0.5 Ce) =			8.29 lbs/day
	(8.29 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			1.51 TPY

$PM_{2.5}$ 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 - 0.5 Ce) =			0.83 lbs/day
	(0.83 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			0.15 TPY

V. Existing Air Quality

This permit is for a portable facility to be located in areas which have been designated unclassified/attainment with all ambient air quality standards. MAQP #2916-01 applies while operating at any location in Montana, except those areas having a Department-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers of certain PM_{10} nonattainment areas.

VI. Air Quality Impacts

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

VII. Ambient Air Impact Analysis

The current permit action is to administrative amendment and no increase in emissions is expected, therefore the Department determined that there will be no additional impacts from this permitting action The Department believes the current conditions and limits will not cause or contribute to a violation on 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	
✓		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	✓	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	✓	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	✓	4. Does the action deprive the owner of all economically viable uses of the property?
	✓	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?
	✓	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	✓	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?
	✓	7a. Is the impact of government action direct, peculiar, and significant?
	✓	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	✓	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?
	✓	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 amendment; therefore, an environmental assessment is not required.

Analysis Prepared by: D. Kuenzli
Date: July 31, 2013