Brian Schweitzer, Governor

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August 9, 2012

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

Dear Ms. Kostelecky:

Montana Air Quality Permit #2730-03 is deemed final as of August 9, 2012, by the Department of Environmental Quality (Department). This permit is for a portable concrete batch 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,

Charles Homer

Manager, Air Permitting, Compliance and Registration Air Resources Management Bureau

(406) 444-5279

Doug Kuenzli

Environmental Science Specialist Air Resources Management Bureau

(406) 444-4267

CH:DCK Enclosure

Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #2730-03

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

August 9, 2012



MONTANA AIR QUALITY PERMIT

Issued To: Fisher Sand & Gravel, Co.

P.O. Box 1034

Dickinson, ND 58602

MAQP: #2730-03

Administrative Amendment (AA) Request

Received: 05/01/2012

Department's Decision on AA: 07/24/2012

Permit Final: 08/09/2012

AFS#: 777-2730

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 concrete batch plant located in the Northwest (NW) ¼ of Section 35, Township 16 North, Range 54 East, in Dawson County, Montana. However, MAQP #2730-03 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. A list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On May 1, 2012, the Department received a request from Fisher to amend MAQP #2730-02 to update the actual location description of the facility which was incorrectly applied to the initial permit. This action is an administrative amendment to correctly identify Section 35, Township 16 North, Range 54 East as the facility's designated location. In addition, the current permit action updates the emissions inventory and reflects current permit language and rule references used by the Department.

Section II: Limitations and Conditions

A. Emission Limitations

- 1. Fisher shall install, operate, and maintain the following air pollution control equipment in accordance with manufacturers specification for the control of particulate matter;
 - a. Particulate bag/fabric filters on the cement silo vents and fabric filter on the weigh hopper/batcher vent.
 - b. Particulate containment boot on the on the batcher load-out spout.
- 2. Fisher shall not cause or authorize to be discharged into the atmosphere from the portable concrete batch plant any emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

- 3. Fisher shall not cause or authorize to be discharged into the atmosphere from any other associated equipment, used in conjunction with this facility, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- 4. 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 and ARM 17.8.752).
- 5. Fisher 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.3 (ARM 17.8.749 and ARM 17.8.752).
- 6. Water and spray bars shall be available on site and used, 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).
- 7. Fisher shall inspect and keep record of repairs for the fabric filter vents on the cement silo every 6 months of operation and the fabric filter vent on the batch bin loading area every 1 month of operation to ensure that each such collector is operating at optimum efficiency as recommended by the manufacturer.
- 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 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. All compliance 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 truck-mix concrete batch 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 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 Fisher 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).

- 3. 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 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. 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 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).

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 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 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 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 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 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 Fisher Sand & Gravel, Co. MAQP #2730-03

I. Introduction/Process Description

A. Permitted Equipment

Fisher owns and operates a truck-mix concrete batch plant in the production of ready-mix concrete with a maximum capacity of 18.6 cubic yards per hours (yds³/hr). The following list of permitted equipment is based on information provided within the initial application and is provided for reference, as this permit is written de minimis friendly certain operation flexibility is allowed and certain like-kind equipment substitutions are allowed.

- 1992 McNielus Batchmaster 12 Portable Ready Mix Batch Plant
 - → Split cement and cement supplement storage silo with vent bag filters
 - → Weigh hopper/ batcher vent fabric filter
- 320 Ton aggregate/sand storage bin with 100 foot (ft) integrated electrical conveyor
- Associated material handling equipment (conveyors, transfer points, etc.)

B. Source Description

Fisher utilizes this truck-mix concrete batch plant operation and associated equipment to process aggregate and cement for the production of concrete mix for various projects. In a typical batch operation, cement and cement supplement is gravity fed from the silo into the cement weigh hopper, followed by sand and/or aggregate which is fed into the weigh hopper via a belt conveyor. The mixture is then gravity fed into a truck-mounted cement drum mixer, along with the appropriate amount of water, where it is mixed. The aggregate storage bins are filled via the 100 ft electric belt conveyor.

Fisher's designated home-pit is identified as the Northwest (NW) ¼ of Section 35, Township 16 North, Range 54 East, in Dawson County, Montana.

C. Permit History

On May 4, 1992, Fisher applied for a permit to operate a McNielus Batchmaster - 12 ready mix concrete batching plant located within an existing gravel pit. This plant was designed as a portable unit, but was installed as a stationary plant. On August 24, 1992, the Department of Environmental Quality (Department) issued **MAQP** #2730-00 to this ready mix concrete batching plant.

On January 21, 1993, the Department received a request to modify permit #2730-00. The modification request outlined a number of items of concern, which were reviewed and modified as appropriate. The description of the filter vents, used for the control of particulate emissions, was revised in the permit to change the reference from baghouse filter vents to fabric filter vents. Annual visible emissions' testing was eliminated from the permit. MAQP #2730-01 replaced MAQP #2730-00.

In 1999, the U.S. Environmental Protection Agency (EPA) informed the department that any condition in an air quality preconstruction permit would be considered a federally enforceable condition. However, there are certain state rules that were never intended to be federally enforceable. The department notified all the facilities holding preconstruction permits that they could request deletion of those conditions based on ARM 17.8.717 and ARM 17.8.315. On May

11, 2001 the Department issued a modification of MAQP #2730-02 to remove these conditions. Removal of either condition did not relieve the facility from complying with the rule upon which the permit condition was based; removal only ensured that the enforcement of the condition remained solely with the department. **MAQP #2730-02** replaced MAQP #2730-01.

D. Current Permit Action

On May 1, 2012, The Department received a request from Fisher to update the actual location description of the facility which was incorrectly applied to the initial permit. This action is an administrative amendment to correctly identify Section 35, Township 16 North, Range 54 East as the facility's designated location. In addition, the current permit action updates the emissions inventory and reflects the current permit language and rule references used by the Department. **MAQP #2730-03** replaces MAQP #2730-02.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for location 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. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality including, but not limited to:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide (SO₂)
 - 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 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 (PM)
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. <u>ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM₁₀)</u>

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. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions 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. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen

sulfide at standard conditions.

- 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Fisher the portable concrete batch plant and associated equipment are subject to NSPS (40 CFR 60), as follows:
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart F Standards of Performance for Portland Cement Plants. This subpart does not apply because the portable truck-mix concrete batch plant does not meet the definition of a Portland Cement Plant.
 - c. 40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. This subpart does not apply because this facility does not crush, grind, or screen nonmetallic minerals, and therefore does not meet the definition of a nonmetallic mineral processing plant.
- 7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for source categories. This facility is not subject to any NESHAP because it does not meet the definition of an affected source under any NESHAP subpart.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This section 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. The current permit action is considered an administrative amendment; as such a permit fee is not required.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

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

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

- 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
- 2. <u>ARM 17.8.743 Montana Air Quality Permits When Required.</u> This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any air contaminant sources that have 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. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
- 5. 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. An affidavit of publication of public notice is not
 required for administrative amendments.
- 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. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving 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. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued

prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. 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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 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 sub-chapter 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 pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tpy of any pollutant;

- b. PTE > 10 tpy of any single hazardous air pollutant (HAP), PTE > 25 tpy of combined HAPs, or 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. <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2730-03 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 for any single HAP and less than 25 tpy of combined of HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to a current NSPS.
 - e. This facility is not subject to a 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.

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.

The current permit action is considered an administrative amendment; therefore a BACT determination was not required for this action.

IV. Emission Inventory

	Emissions Tons/Year [PTE]						
Emission Source	PM	PM ₁₀	PM _{2.5}	CO	NOx	SOx	VOC
Aggregate Delivery - Ground Storage	0.52	0.25					
Sand Delivery - Ground Storage	elivery - Ground Storage 0.12 0.06						
Aggregate Transfer to Conveyor	0.52	0.25					
Sand Transfer to Conveyor	0.12	0.06					
Aggregate Transfer to Elevated Storage		0.25					
Sand Transfer to Elevated Storage	fer to Elevated Storage 0.12 0.06						
Cement Delivery - Unloading to Storage Silo		0.01					
Supplement Delivery - Unloading to Storage Silo 0.02		0.02					
Weigh Hopper - Sand/Aggregate Loading	0.64	0.31					

Truck Mix Loading		25.74	7.14					
Unpaved Roadways	(Haul Roads)	4.20	1.16	0.12			-	-
'	TOTAL EMISSIONS ▶	32.55	9.56	0.12	0.00	0.00	0.00	0.00

PM₁₀, particulate matter with an aerodynamic diameter of 10 microns or less CO. carbon monoxide cu, cubic PM_{2.5}, particulate matter with an aerodynamic diameter of 2.5 microns or EF, emission factor less [Sum of condensable and filterable] SCC, Source Classification Code hr, hour SO₂, sulfur dioxide lbs, pounds mph, miles per hour TPH, tons per hour NO_X, oxides of nitrogen TPY, tons per year PTE, Potential To Emit VMT, vehicle miles travelled PM, particulate matter VOC, volatile organic compounds PM_{COND}, condensable particulate matter

McNielus Batchmaster 12 Mobile Concrete Batch Plant

Concrete Production Rate: 18.64 cubic yards/hour (Maximum) 163270 cubic yards/year (Maximum)

37.5 tons/hour (Maximum) 328500 tons/year (Maximum)

Allowable Operating Hours: 8760

Batch Plant Power: Land-Line Utility Power

Material Handling - Aggregate

Process Rate: 18.64 cu. yards/hour Operating Hours: 8760 hours/year

Aggregate Delivery to Ground Storage [SCC 3-05-011-21]

PM Emissions (uncontrolled):

Emission Factor 0.0064 lbs/cu. yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0064 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.12 lbs/hr

(0.12 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.52 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0031 lbs/cu, yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0031 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.06 lbs/hr

(0.06 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.25 TPY

Aggregate Transfer to Conveyor [SCC 3-05-011-23]

PM Emissions (uncontrolled):

Emission Factor 0.0064 lbs/cu. yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0064 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.12 lbs/hr

(0.12 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.52 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0031 lbs/cu. yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0031 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.06 lbs/hr

(0.06 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.25 TPY

Aggregate Transfer to Elevated Storage [SCC 3-05-011-04]

PM Emissions (uncontrolled):

Emission Factor 0.0064 lbs/cu. yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0064 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.12 lbs/hr

(0.12 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.52 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0031 lbs/cu. yard produced [AP-42 Table 11.12-2, 6/06]

Calculations (0.0031 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.06 lbs/hr

(0.06 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.25 TPY

Material Handling - Sand

Process Rate: 18.6 cu. yards/hour Operating Hours: 8760 hours/year

Sand Delivery to Ground Storage [SCC 3-05-011-22]

PM Emissions (uncontrolled):

Emission Factor 0.0015 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0015 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.03 lbs/hr

(0.03 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.12 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0007 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0007 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.01 lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.06 TPY

Sand Transfer to Conveyor [SCC 3-05-11-24]

PM Emissions (uncontrolled):

Emission Factor 0.0015 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0015 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.03 lbs/hr

(0.03 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.12 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0007 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0007 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.01 lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.06 TPY

Sand Transfer to Elevated Storage [SCC 3-05-011-05]

PM Emissions (uncontrolled):

Emission Factor 0.0015 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0015 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.03 lbs/hr

(0.03 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.12 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0007 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0007 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.01 lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.06 TPY

Material Handling - Cement & Cement Supplement

Process Rate: 18.6 cu. yards/hr Operating Hours: 8760 hours/year

Cement Delivery to Silo [SCC 3-05-011-07]

PM Emissions (uncontrolled):

Emission Factor 0.0002 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0002 lbs/cu. yard) * (18.64 cu. yard/hr) = 0.004 lbs/hr

(0.004 lbs/hr) * (8760 hrs/yr) *(0.005 tons/lb) = 0.02 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0001 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0001 lbs/cu. yard) * (18.64 cu. yard/hour) = 0.002 lbs/hr

(0.002 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.01 TPY

Cement Supplement (Fly Ash) Delivery to Silo [SCC 3-05-011-17]

PM Emissions (uncontrolled):

Emission Factor 0.0003 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0003 lbs/cu. yard) * (18.64 cu. yard/hour) = 0.01 lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.02 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.0002 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0002 lbs/cu. yard) * (18.64 cu. yard/hour) = 0.004 lbs/hr

(0.004 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.02 TPY

Weigh Hopper Loading [SCC 3-05-011-08]

Process Rate: 18.6 cu. yards/hour Operating Hours: 8760 hours/year

PM Emissions (uncontrolled):

Emission Factor 0.0079 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0079 lbs/cu. yard) * (18.64 cu. yard/hour) = 0.15 lbs/hr

(0.15 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.64 TPY

PM₁₀ Emissions (controlled):

Emission Factor 0.0038 lbs/cu. yard produced [AP-42 Table 11.12-5, 6/06]

Calculations (0.0038 lbs/cu. yard) * (18.64 cu. yard/hour) = 0.07 lbs/hr

(0.07 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 0.31 TPY

Truck Mix Loading [SCC 3-05-011-10]

Process Rate: 18.6 cu. yards/hour [Concrete]

37.50 tons/hour [Concrete]

5.26 tons/hour [Cement & Cement Supplement] *

Operating Hours: 8760 hours/year

* Basis: AP-42 Table 11-12-2 Footnote (a)

PM Emissions (uncontrolled):

Emission Factor 1.1180 lbs/ton material loaded [AP-42 Table 11.2-2, 6/06]

Calculations (1.118 lbs/ton) * (5.26 tons/hour) = 5.88 lbs/hr

(5.88 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 25.74 TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor 0.3100 lbs/ton material loaded [AP-42 Table 11.2-2, 6/06]

Calculations (0.31 lbs/ton) * (5.26 tons/hour) = 1.63 lbs/hr

(1.63 lbs/hr) * (8760 hrs/yr) * (0.005 tons/lb) = 7.14 TPY

Unpaved Roadways (Haul Roads)

5 Miles/Day [Estimate] Miles Travelled:

Vehicle Weight: 27.5 Tons [Mean Vehicle Weight Empty/Full]

Control Method: Water Application Control Efficiency (Ce): 50%

Emission Factor $EF = k(s/12)^a * (W/3)^b$ [AP-42 13.2.2.2. 11/06]

where: EF, Emission Factor = Ibs Emitted Per Vehicle Mile Traveled (VMT)

k, Empirical Constant PM = 4.9 [AP-42 Table 13.2.2-2, 11/06] k, Empirical Constant PM10 = 1.5 [AP-42 Table 13.2.2-2, 11/06] k, Empirical Constant PM2.5 = 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) = 27.5 [Applicant Provided Data] a, Empirical Constant PM = 0.7 [AP-42 Table 13.2.2-2, 11/06] 0.9 [AP-42 Table 13.2.2-2, 11/06] a, Empirical Constant PM10 /PM2.5 = b, Empirical Constant PM - PM2.5 = 0.45 [AP-42 Table 13.2.2-2, 11/06]

PM Emissions (controlled):

Emission Factor $EF = 4.9 * (7.1/12)^{0.7} * (27.5/3)^{0.45} =$ 9.20 lbs/VMT

Calculations (9.20 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =22.99 lbs/day (22.99 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =4.20 TPY

PM₁₀ Emissions (controlled):

 $EF = 1.5 * (7.1/12)^{0.9} * (27.5/3)^{0.45} =$ **Emission Factor** 2.53 lbs/VMT

Calculations (2.53 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =6.34 lbs/day 1.16 TPY

(6.34 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =

PM_{2.5} Emissions (controlled):

Emission Factor $EF = 0.15 * (7.1/12)^{0.9} * (27.5/3)^{0.45} =$ 0.25 lbs/VMT

Calculations (0.25 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =0.63 lbs/day

(0.63 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =0.12 TPY

V. **Existing Air Quality**

The designated location of this facility is the NW ¼ of Section 35, Township 16 North, Range 54 East, in Dawson County, Montana. This location and those areas for which this facility is permitted to operate under MAQP #2730-03 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

MAOP #2730-03 will cover the plant while operating at any location within Montana, excluding those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas.

Emissions generated from the operation of this source are to be well control and limited, furthermore, the portable unit would be expected to be operated on an intermittent and seasonal basis and any air quality impacts would be expected to be minimal and temporary.

VII. Ambient Air Quality Impacts

The Department determined that there will be no negative impact from this permit action because this permitting action is considered an administrative action. Furthermore, Department believes that the amount of emissions generated by this project will not exceed any set ambient standard.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 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 pubic 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

The 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: D. Kuenzli

Date: July 13, 2012