Montana Department of
ENVIRONMENTAL QUALITY

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April 28, 2014

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

Dear Mr. Fisher:

Montana Air Quality Permit #5021-00 is deemed final as of April 23, 2014, by the Department of Environmental Quality (Department). This permit is for a portable diesel fired generator engine. 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
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

JM:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #5021-00

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

April 23, 2014

MONTANA AIR QUALITY PERMIT

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

MAQP: # 5021-00
Application Complete: 3/12/2014
Preliminary Determination Issued: 3/20/2014
Department's Decision Issued: 4/7/2014
Permit Final: 4/23/2014
AFS #: 777-5021

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Fisher Sand & Gravel Co. (Fisher Sand & Gravel) 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. Permitted Equipment

Fisher Sand & Gravel intends to operate a portable diesel-fired generator engine, with a maximum rated brake-horsepower of 1,502. This permit is intended to be written in a flexible permitting manner, in which any diesel engine which meets permit requirements can be utilized. Notification requirements apply.

B. Plant Location

Fisher Sand & Gravel intends to operate a portable diesel-fired generator engine, which may initially be located in Section 34, Township 16 North, Range 54 East, Dawson County, Montana. However, MAQP #5021-00 facilitates portable operations, and applies while operating at any location in Montana, except 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. An addendum to this permit will be required for locations in or within 10 km of certain PM_{10} nonattainment areas. A list of the permitted equipment is contained in Section I.A of the permit analysis.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Fisher Sand & Gravel shall not operate or have on site more than one (1) diesel-fired generator engine. The maximum rated design capacity of the engine that drives the generator shall not exceed 1,502 brake-horsepower (bhp) (ARM 17.8.749).

2. The diesel-fired generator engine shall have maximum oxides of nitrogen (NO_x) emissions less than or equal to 10.5 grams per horsepower-hour (g/hp-hr), as indicated on a manufacturer/vendor supplied emission data / emission specification sheet. An engine certified to meet EPA Tier II standards or better shall meet this emissions requirement (most engines manufactured year 2006 or later) (ARM 17.8.749).

3. Fisher Sand & Gravel shall maintain, on site, manufacturer or vendor supplied documentation of the diesel-fired generator engine, including make, model, emissions rating, and year of manufacture (ARM 17.8.749).

4. Operation of the diesel-fired generator engine shall not exceed 3,050 hours during any rolling 12-month time period (ARM 17.8.749).

5. All visible emissions from the diesel-fired generator engine shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

6. Fisher Sand & Gravel 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).

7. Fisher Sand & Gravel 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.6 (ARM 17.8.749).

8. If the permitted equipment is used in conjunction with any other equipment owned or operated by Fisher Sand & Gravel, 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).

9. Fisher Sand & Gravel shall comply with all applicable standards and limitations, and the testing, reporting, recordkeeping, and notification requirements contained in 40 Code of Federal Regulations (CFR) 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. The Department may require further testing (ARM 17.8.105).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

C. Operational Reporting Requirements

1. If this portable diesel-fired generator engine is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Fisher Sand & Gravel 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).

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

5. Fisher Sand & Gravel shall document, by month, the hours of operation of the diesel generator engine. By the 25th day of each month, Fisher Sand & Gravel shall total the hours of operation for the diesel generator engine for the previous month, and calculate the rolling 12 month sum. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.4. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

Fisher Sand & Gravel shall provide the Department with written notification of the actual start-up date and location of the generator engine postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – Fisher Sand & Gravel shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Fisher Sand & Gravel 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 the Department at the location of the permitted source.

G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Fisher Sand & Gravel 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 Sand & Gravel 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 #5021-00

I. Introduction/Process Description

Fisher Sand & Gravel Co. (Fisher Sand & Gravel) owns and operates a portable diesel-fired generator engine.

A. Permitted Equipment

Fisher Sand & Gravel proposes to operate a portable diesel-fired generator engine, with a maximum rated design capacity of 1,502 brake-horsepower (bhp). The diesel-fired generator engine shall have maximum oxides of nitrogen (NO_x) emissions less than or equal to 10.5 grams per horsepower-hour (g/hp-hr), as indicated on a manufacturer/vendor supplied emission data / emission specification sheet. An engine certified to meet EPA Tier II standards or better shall meet this emissions requirement (most engines manufactured year 2006 or later)

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 –Air Resources Management Bureau (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

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

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

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the 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 Sand & Gravel 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 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
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM_{10})
11. ARM 17.8.230 Fluoride in Forage

Fisher Sand & Gravel must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Fisher Sand & Gravel shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section

4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Fisher Sand & Gravel is potentially an NSPS affected facility under this standard and may be 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 IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by Fisher Sand & Gravel, the CI ICE equipment to be used under MAQP #5021-00 may be subject to this subpart if the generator engine remains in one location for more than 12 months, or operates for 3 months in an operation that remains in the same location for two consecutive years and operates seasonally. Further, the engine must meet, for example, the manufactured date requirements.

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. Fisher Sand and Gravel is considered potentially a NESHAP-affected facility under 40 CFR Part 63 and may be subject to the requirements of the following subparts.

   a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.

   b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Fisher Sand & Gravel, the RICE equipment to be used under MAQP #5021-00 may be subject to this subpart if the generator engine remains in one location for more than 12 months, or operates for 3 months in an operation that remains in place for two consecutive years and operates seasonally.

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. Fisher Sand & Gravel submitted the appropriate permit application fee for the current permit action.

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

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 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 of any pollutant and any other facility or emitting unit upon which construction was commenced, or that was installed, after November 23, 1968, that is not specifically excluded under ARM 17.8.744, and that has the potential to emit more than 25 tons per year of any airborne pollutant, other than lead, that is regulated under this chapter. Fisher Sand & Gravel has a PTE greater than 25 tons per year of oxides of nitrogen, carbon monoxide, and volatile organic compounds; 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. Fisher Sand & Gravel submitted the 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. Fisher Sand & Gravel submitted an affidavit of publication of public notice for the March 6, 2014, issue of the *Glendive Ranger-Review*, a newspaper of general circulation in the Town of Glendive in Dawson County, as proof of compliance with the public notice requirements.

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 Sand & Gravel 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 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 tons/year of 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 #5021-00, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.

   c. This source is not located in a serious PM_{10} nonattainment area.

   d. This facility is potentially subject to current NSPS (40 CFR 60 Subpart IIII).

   e. This facility is potentially subject to current NESHAP standards (40 CFR 63 Subpart ZZZZ).

   f. This source is not a Title IV affected source

   g. This source is not a solid waste combustion unit.

   h. This source is not an EPA designated Title V source. Based on these facts, the Department has determined that Fisher Sand & Gravel 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 Sand & Gravel may be required to obtain a Title V Operating Permit.

III. BACT Determination

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

Diesel-Fired Generator Engine:

Any new diesel-fired engine would likely comply with federal engine emission limitations including, for example, EPA Tiered emission standards for non-road engines (40 CFR Part 89 or 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). The Department has determined that compliance with any applicable federal standards, with no additional requirements, constitutes BACT for these engines.

The control options and work practices selected contain costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory**

Source	Tons/Year						
	PM	PM_{10}	$PM_{2.5}$	NO_X	VOC	CO	SO_2
1,502 bhp Diesel-Fired Generator Engine meeting Tier II family emissions rating	5.04	5.04	5.04	39.53[a]	5.76	15.30	4.70

Footnotes:

a. Inventory reflects enforceable limits on hours of operation to keep emissions at or below the attainment area modeling threshold of 40 TPY of NO_X.

** CO = carbon monoxide
hp = horsepower
hr = hour
lb = pound
N/A = not applicable
ND = no data available
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
SO_2 = sulfur dioxide
TPY = tons per year
VOC = volatile organic compounds
yr = year

Diesel-Fired Generator Engine

Operational Capacity of Engine = 1,502 hp
Hours of Operation = 3,050 hours

Total $PM/PM_{10}/PM_{2.5}$ Emissions:
Emission Factor = 0.0022 lbs/hp-hr (All PM < 1 mm, AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (3,050 hours) * (1,502 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 5.04 ton/yr

NOx Emissions:
Emission Factor = 0.017 lbs/hp-hr EPA Tier II Family Emissions
Calculation: (3,050 hours) * (1,502 hp) * (0.017 lbs/hp-hr) * (ton/2000 lb) = 38.94 ton/yr
CO Emissions:
Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (3,050 hours) * (1,502 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 15.30 ton/yr

VOC Emissions:
Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
Calculation: (3,050 hours) * (1,502 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 5.76 ton/yr

SOx Emissions:
Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (3,050 hours) * (1,502 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 4.70 ton/yr

CO_2 Emissions:
Emission Factor = 1.15 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (3,050 hours) * (1,502 hp) * (1.15 lbs/hp-hr) * (ton/2000 lb) = 2,634.13 ton/yr

V. Existing Air Quality

This permit is for a portable diesel-fired generator engine permitted to operate in areas that have been designated unclassified/attainment with all ambient air quality standards.

VI. Air Quality Impacts

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

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5021-00, the Department determined that the impact from this permitting action would be expected to be minor.

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**	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?

YES	NO	
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	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

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Fisher Sand & Gravel Co.

Montana Air Quality Permit number (MAQP): 5021-00

Preliminary Determination Issued: 3/20/2014
Department Decision Issued: 4/07/2014
Permit Final: 4/23/2014

1. *Legal Description of Site*: Various locations throughout the state

2. *Description of Project*: Portable diesel-fired generator engine

3. *Objectives of Project*: To provide electrical power for various needs, throughout the state.

4. *Alternatives Considered*: In addition to the proposed action, the Department of Environmental Quality (Department) also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Fisher Sand & Gravel Co (Fisher Sand & Gravel) has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5021-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			XX			Yes
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes

G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	Historical and Archaeological Sites			XX			Yes
J	Cumulative and Secondary Impacts			XX			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The diesel-fired generator engine would potentially impact terrestrial and aquatic life and habitats by virtue of emissions of pollutants. However, the proposed project would be considered a minor source of emissions by industrial standards, and limitations and conditions would be placed in MAQP #5021-00 to minimize these emissions. Minor effects to terrestrial life would be expected.

B. Water Quality, Quantity and Distribution

Water would be required for control of dust from roadways, as needed. The amount of water use would be expected to be minor on an industrial scale. Pollutant deposition into waterways may be possible, however, the proposed project would be considered a minor source of emissions by industrial standards, and limitations and conditions would be placed in MAQP #5021-00 to minimize these emissions. Impacts to water quality, quantity, and distribution would be expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The facility would use relatively small amounts of water for purposes of pollution control. The Department would expect minor impacts to geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Deposition of air pollutants on surrounding vegetation would be expected to be minor, as the annual emissions rates are relatively minor.

E. Aesthetics

The Department would expect minor impacts on aesthetics, as the diesel-fired generator engine would produce noise. Visible emissions from a properly operated and maintained diesel-fired generator engine would be expected to be minimal, and MAQP #5021-00 would require that the source maintain visible emissions in compliance with generally applicable opacity rules.

F. Air Quality

The air quality impacts from the diesel-fired generator engine would be expected to be minor because the facility would be required to operate in accord with an MAQP and air quality rules. Furthermore, this project will likely operate on a temporary and intermittent basis. Therefore, air quality impacts would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in any given area. However, allowable emissions and resulting impacts from the project would be expected to be minor due to the low annual emissions of those pollutants emitted, and as a result of conditions that would be placed in the MAQP. Impacts to air, water, soil, and vegetation would be expected to be minor, and impacts to unique endangered, fragile, or limited environmental resources would be expected to be minor.

H. Demands on Environmental Resource of Water, Air and Energy

The project would require only small quantities of water, air, and energy for proper operation. Water would be used for dust suppression and would control particulate emissions from unpaved roads and work areas. Energy requirements would consist mostly of diesel for the diesel-fired generator engine. Impacts to water, air, and energy resources in any given area would be expected to be minor.

I. Historical and Archaeological Sites

No physical change to any structure or area is typically required for use of a portable diesel-fired generator engine. The amount of annual emissions from the diesel-fired generator engine is minor on an industrial scale, and impacts to any historical or archaeological sites would be minor, if any at all.

J. Cumulative and Secondary Impacts

The proposed project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment. The potential impacts to the individual physical and biological considerations above were minor. Collectively, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be expected to be minor.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes

J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals			XX			Yes
L	Cumulative and Secondary Impacts			XX			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores
B. Cultural Uniqueness and Diversity

No more than minor impacts to social structures and mores or cultural uniqueness and diversity would be expected from the operation of the diesel-fired generator engine. No significant increase in employment would be expected to occur as the result of this permitting action. Further, the diesel-fired generator engine would be expected to comply with the requirements of an MAQP.

C. Local and State Tax Base and Tax Revenue

No more than a minor impact would be expected as a result of issuance of MAQP #5021-00.

D. Agricultural or Industrial Production

The diesel-fired generator engine would be expected to comply with the requirements of an MAQP. Any impacts to agricultural or industrial production would be expected to be minor.

E. Human Health

Conditions would be incorporated into MAQP #5021-00 to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

All recreational opportunities, if available in the area, would still be expected to be accessible. Noise from the diesel-fired generator engine would occur. Emissions on an annual rate basis would be minor on an industrial scale. It is likely that the diesel-fired generator engine will typically operate in areas with other industrial equipment in operation. Any changes in the quality of recreational and wilderness activities would be expected to be minor.

G. Quantity and Distribution of Employment
H. Distribution of Population

No significant increase in employment would be expected to occur as the result of this permitting action. Any impacts to quantity and distribution of employment or distribution of population would be extremely minor.

I. Demands for Government Services

Government services would continue to be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor.

J. Industrial and Commercial Activity

MAQP #5021-00 is permitting a portable diesel-fired generator engine. Therefore, the operations of the diesel-fired generator engine will likely be temporary and intermittent. No more than a minor impact would be expected from a diesel-fired generator engine alone.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that issuance of MAQP #5021-00 would hinder. The permit is based on rules designed to protect public health and welfare. Further, a local permit would be required in those areas which have an approved permitting program, and operations in a non-attainment area would require an addendum to this permit.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation. Furthermore, no other industrial operations are expected to result from this permitting action.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable diesel-fired generator engine. MAQP #5021-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Shawn Juers
Date: March 11, 2014