



March 20, 2015

Brandi Griffith
Griffith Excavating, Inc.
P.O. Box 1193
Baker, MT 59313

Dear Ms. Griffith:

Montana Air Quality Permit #3417-02 is deemed final as of March 20, 2015, by the Department of Environmental Quality (Department). This permit is for a portable crushing facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

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

A handwritten signature in black ink that reads "Ed Warner".

Ed Warner
Lead Engineer – Air Permitting Section
Air Quality Bureau
(406) 444-2467

JM:EW
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3417-02

Griffith Excavating, Inc.
P.O. Box 1193
Baker, MT 59313

March 20, 2015



MONTANA AIR QUALITY PERMIT

Issued To: Griffith Excavating, Inc.
P.O. Box 1193
Baker, MT 59313

MAQP: #3417-02
Administrative Amendment (AA) Request
Received: 03/02/2015
Department's Decision on AA: 03/04/2015
Permit Final: 03/20/2015
AFS #: 777-3417

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Griffith Excavating, Inc. (Griffith), 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

Griffith operates a portable crushing facility initially located in Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. MAQP #3417-02 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 (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On March 2, 2015, the Department received an administrative amendment request to update the permit condition regarding two 400 horsepower (hp) diesel engines/generators to allow for one or more diesel engines/generators with a maximum combined rated horsepower not to exceed 800 hp. Since this proposed change does not represent the addition of any potential emissions to the permit, it can be accomplished via an administrative amendment in accordance with ARM 17.8.764. The March 2, 2015 correspondence also informed the Department that the homepit location for the facility has moved to across the road from the previous location; however, the close proximity to the previous location means that the legal description of this location remains the same. The facility name has also been updated. The current permit action incorporates this change and updates the permit language and format to current Department practice.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

1. Griffith shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
2. Griffith shall not cause or authorize to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
3. Griffith shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
4. Water and water spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
5. Griffith shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).
6. Griffith shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. Crushing production from the facility shall be limited to 4,090,920 tons during any rolling 12-month time period (ARM 17.8.749).
8. Griffith shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 467 TPH (ARM 17.8.749).
9. Griffith may operate one or more diesel-powered engines/generators and the maximum combined rated design capacity shall not exceed 800 hp (ARM 17.8.749).
10. The diesel powered engines/generators shall be limited to 6,450 hours of operation each during any rolling 12 month time period (ARM 17.8.749 and ARM 17.8.1204).
11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Griffith, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

12. Griffith shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
13. Griffith shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 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. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
2. Griffith shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Griffith as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
3. Griffith shall supply the Department with annual production information for all emission points, as required by the Department in the annual Emission Inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of 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 units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. Griffith 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 start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
5. Griffith shall document, by month, the amount of total crushing production for the facility. By the 25th day of each month Griffith shall calculate the total amount of total combined crushing production for the facility during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Griffith shall document, by month, the hours of operation of each diesel-powered engine/generator. By the 25th day of each month Griffith shall calculate the total amount of hours of operation of each engine/generator. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
7. Griffith shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

Section III: General Conditions

- A. Inspection - Griffith 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 (CEMS, 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 Griffith fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Griffith of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Griffith 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. Griffith shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Griffith Excavating, Inc.
MAQP #3417-02

I. Introduction/Process Description

A. Permitted Equipment

Griffith Excavating, Inc. (Griffith) owns and operates a portable crushing facility consisting of a portable crusher (up to 467 tons per hour (TPH)), diesel generator(s) up to 800 combined horsepower (hp), and 4 conveyors.

Griffith is initially located in the Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. Montana Air Quality Permit (MAQP) #3417-02 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those 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.* Griffith will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Source Description

Griffith uses this crushing plant and associated equipment to crush scoria rock for use as road material. For a typical operational setup, materials are loaded into the crushing plant by a loader, transferred by conveyor, and passed through the crusher. Materials are sent to stockpile for sale and use as road material.

C. Permit History:

On October 13, 2005, the Department received a complete MAQP application from Griffith to operate a 467 TPH impact crusher and four conveyors. MAQP #3417-00 became final on December 7, 2005.

On February 9, 2009, the Department received a complete MAQP Application from Griffith to add two 400 hp diesel engines/generators. The current permit action updates the permit to include that equipment and to reflect the current permit language used by the Department. **MAQP #3417-01** replaced MAQP #3417-00.

D. Current Permit Action

On March 2, 2015, the Department received an administrative amendment request to update the permit condition regarding two 400 horsepower (hp) diesel engines/generators to allow for one or more diesel engines/generators with a maximum combined rated horsepower not to exceed 800 hp. Since this proposed change does not represent the addition of any potential emissions to the permit, it can be accomplished via an administrative amendment in accordance with ARM

17.8.764. The March 2, 2015 correspondence also informed the Department that the homepit location for the facility has moved to across the road from the previous location; however, the close proximity to the previous location means that the legal description of this location remains the same. The facility name has also been updated. **MAQP #3417-02** replaces MAQP #3417-01.

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. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Griffith must comply 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 (PM). (2) Under this rule, Griffith shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne PM.
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 PM caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or allow to be discharged into the atmosphere PM 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 rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below.
 - b. 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Griffith, in obtaining a generalized permit for the crushing equipment, the 2002 Lippmann 42x48 Impact crusher is an NSPS-affected source because of the size and date of manufacture of the equipment.
 - c. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump engine. The diesel engine/generators were manufactured in 1978 and 1980 and therefore are not subject to this Subpart. However, since this permit is written in a de minimis-friendly manner, this regulation may apply to engines at the facility.
6. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule requires that a source, as defined and applied in 40 CFR Part 63, comply with the requirements of 40 CFR Part 63.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of hazardous air pollutant (HAP) emissions is a source that is not a major source. Griffith is considered an area source of HAP emissions and operates RICE equipment; therefore, the engines are potentially subject to this subpart depending upon the location and nature of operation. A RICE is considered stationary if it remains or will remain at the

permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 consecutive years) and operates at least 3 months each year. Based on the information submitted by Griffith, the RICE equipment to be used under MAQP #3417-02 may be subject to this subpart because they are an area source of HAP emissions and the engine(s) may remain at the same home pit location for more than 12 consecutive months.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Griffith submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an Open Burning Permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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.

F. 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 facility 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. Griffith has a PTE greater than 15 tons per year of total PM and PM₁₀; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Griffith 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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance 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 IV 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 Griffith 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 Griffith, 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 does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

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

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

- a. 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.
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ 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 #3417-01 for the Griffith facility, the following conclusions were made:
- a. The facility's PTE is less than 100 tons/year.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is potentially subject to area source provisions of a current NESHAP standard (40 CFR 63, Subpart ZZZZ).
 - e. This facility is currently subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

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

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.

- ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. This rule requires that Griffith shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

III. BACT Analysis

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

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

IV. Emission Inventory

W/ Operational Limit on engines/generators of 6,450 hrs each

Source	PM	PM-10	Tons/Year		CO	SOx
			NOx	VOC		
Lippman 4248LP Impact Crusher	11.05	4.91				
400 hp Cummins Generator	2.84	2.84	39.99	3.23	8.64	2.71
400 hp Cat Generator	2.84	2.84	39.99	3.23	8.64	2.71
Transfer Operations (4 conveyors)	18.41	6.75				
Pile Forming (1 pile formed)	15.14	7.16				
Bulk Loading (2)	15.14	7.16				
Total	65.42	31.66	79.98	6.46	17.28	5.42

NOTE: The emission inventory table reflects the two 400 hp engines that were permitted with the issuance of MAQP #3417-01. Griffith has requested that the permit allow for the operation of one or more engines with a maximum combined rated horsepower not to exceed 800 hp. This update in language does not represent a change in the total allowable emissions; therefore, the emissions inventory table and calculations were not updated.

CRUSHERS - (SCC 3-050030-03, uncontrolled)

Lippman 4248LP Impact Crusher

Process Rate: 467.0000 tons/hr
Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions (controlled):

Emission Factor: 0.0054 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.0054 lbs/ton * 467 tons/hr = 2.522 lbs/hr
2.522 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 11.046 tons/yr

PM-10 Emissions (controlled):

Emission Factor: 0.0024 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.0024 lbs/ton * 467 tons/hr = 1.121 lbs/hr
1.121 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 4.910 tons/yr

Material Transfer - (SCC 3-05-020-06, uncontrolled)

Material Transfer (3 transfers)

Process Rate: 467.0000 tons/hr
Number of Transfers: 3.0000 Transfers
Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions:

Emission Factor: 0.0030 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.003 lbs/ton * 467 tons/hr * 3 Transfers = 4.203 lbs/hr
4.203 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 18.409 tons/yr

PM-10 Emissions:

Emission Factor: 0.0011 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.0011 lbs/ton * 467 tons/hr * 3 Transfers = 1.541 lbs/hr
1.541 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 6.750 tons/yr

Pile Forming (1 Pile)

Process Rate: 467.0000 tons/hr
Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions:

$$E = k(0.0032) \left(\frac{U}{5} \right)^{1.3} \left(\frac{M}{2} \right)^{1.4} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

k = 0.7400 for PM
k = 0.3500 for PM10
M = 1.5450 %
U = 9.1000 MPH

average moisture content observed in mineral processing: AP-42 table 11.19.2-1 note b
statewide average : <http://met-www.cit.cornell.edu/ccd/wndspd98.html>

PM E = 0.0074 lbs/ton
PM10 E = 0.0035 lbs/ton

PM Emissions:

Emission Factor: 0.0074 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0074 lbs/ton * 467 tons/hr = 3.456 lbs/hr
3.456 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 15.137 tons/yr

PM-10 Emissions:

Emission Factor: 0.0035 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0035 lbs/ton * 467 tons/hr = 1.635 lbs/hr
1.635 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 7.161 tons/yr

Bulk Loading (2)

Process Rate 467.0000 tons/hr

Generators - (SCC 2-02-001-02, 2-03-001-01)

1980 Cummins Marathon Model NTA 855

Rated hp: 400.0000 hp
6450.0000 hrs

PM Emissions - hP

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0022 lb/hP-hr *400 hP = 0.880 lb/hr
0.88 lbs/hr *6450 hrs * 0.0005 tons/lb = 2.838 tons/yr

PM-10 Emissions assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)
0.880 lb/hr
2.838 tons/yr

NO_x

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.031 lb/hP-hr *400 hP = 12.400 lb/hr
12.4 lbs/hr *6450 hrs * 0.0005 tons/lb = 39.990 tons/yr

CO

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0067 lb/hP-hr *400 hP = 2.680 lb/hr
2.68 lbs/hr *6450 hrs * 0.0005 tons/lb = 8.643 tons/yr

SO_x

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0021 lb/hP-hr *400 hP = 0.840 lb/hr
0.84 lbs/hr *6450 hrs * 0.0005 tons/lb = 2.709 tons/yr

VOC

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations 0.0025 lb/hp-hr *400 hp = 1.000 lb/hr
1 lb/hr *6450 hrs * 0.0005 tons/lb = 3.225 tons/yr

Total HAPs

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)
Conversion Factor 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations 7000 BTU/hp-hr *400 hp *0.0037 lb/MMBTU * 10⁻⁶ BTU/MMBTU = 0.010 lb/hr
0.01 lb/hr *6450 hr * 0.0005 tons/lb = 0.032 ton/yr

1978 Cat Model 3406A

Rated hp: 400.0000 hp
6450.0000 hrs

All Potential To Emit calculations will be the same as above. I.E. :

PM Emissions

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0022 lb/hP-hr *400 hP = 0.880 lb/hr
0.88 lbs/hr *6450 hrs * 0.0005 tons/lb = 2.838 tons/yr

V. Existing Air Quality

MAQP #3417-02 is issued for the operation of a portable aggregate screening facility to be initially located in Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* Griffith will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable crushing plant to be located at various locations around Montana. This permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived. Further, the amount of controlled particulate emissions generated by this project should not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared By: Ed Warner
Date: March 3, 2015