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August 16, 2012

Joni Johnson
PO Box 136
212 Broadway Street
Culbertson, MT 59218

Dear Ms. Johnson:

Montana Air Quality Permit #4666-03 is deemed final as of August 16, 2012, by the Department of Environmental Quality (Department). This permit is for a non-metallic processing operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Charles Homer
Manager, Air Permitting, Compliance and Registration
Air Resources Management Bureau
(406) 444-5279

Tashia Love
Environmental Science Specialist
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CH:TL
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4666-03

Concord Field Services, LLC Plant #2
PO Box 136
212 Broadway Street
Culbertson, MT 59218

August 16, 2012



MONTANA AIR QUALITY PERMIT

Issued To: Concord Field Services, LLC
Plant #2
P.O. Box 136
212 Broadway Street
Culbertson, MT 59218

MAQP: #4666-03
Application Complete: May 25, 2012
Preliminary Determination Issued: June 29, 2012
Department's Decision: July 31, 2012
Permit Final: August 16, 2012
AFS #: 777-4666

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

SECTION I: Permitted Facilities

A. Plant Location

Concord proposes to operate a portable nonmetallic mineral processing operation which will initially be located at Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana. However, MAQP #4666-03 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 May 25, 2012, the Department received a request from Concord for a modification for an addition of an impact crusher with an integral diesel-fired engine/generator and one diesel-fired engine/generator to MAQP #4666-03. The current permit action is a modification and updates equipment currently operated at the facility, emissions inventory, and provides an updated environmental assessment.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity
2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

- For equipment that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Water and spray bars shall be available on-site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
- 5. Concord shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 6. Concord shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749 and ARM 17.8.752).
- 7. Concord shall not operate more than two crushers at any given time and the maximum rated design capacity of the crusher shall not exceed 700 tons per hour (TPH) (ARM 17.8.749).
- 8. Concord shall not operate more than one screen at any given time and the maximum rated design capacity of the screen shall not exceed 700 TPH (ARM 17.8.749).
- 9. Concord shall not operate or have on-site more than three diesel-fired engine/generators. The maximum capacity of the engines shall not exceed 1212 horsepower (hp) (ARM 17.8.749).
- 10. The diesel-fired engine/generator with a maximum rate capacity of up to 837 hp shall be compliant with Environmental Protection Agency's (EPA) non-road compression-ignition engine, Tier 2 (at minimum) emission standards (ARM 17.8.749).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Concord, 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).
- 12. Concord shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 13. Concord shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart III, *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 III; 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, Subpart A and Subpart OOO). Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

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

SECTION III: General Conditions

- A. Inspection – Concord shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Concord fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Concord of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Concord 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. Concord 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
Concord Field Services, LLC
MAQP #4666-03

I. Introduction/Process Description

Concord Field Services, LLC (Concord) owns and operates a portable crushing and screening plant throughout various locations of Montana.

A. Permitted Equipment

Equipment permitted under this action consists of the following;

- 2008 Fabtec 3042 Jaw Crusher - 350 TPH
- 1998 Eagle Impact Crusher (350 TPH) with diesel-fired engine (255 hp)
- 2007 Screen Deck CCFAB 6'x20' -700 TPH
- 2008 Caterpillar Diesel-Fired Engine/Generator not to exceed 837 hp
- Caterpillar Diesel-Fired Engine/Generator not to exceed 120 hp
- Associated material handling equipment

B. Source Description

Concord owns and operates a crushing/screening facility which operates to crush and sort scoria/gravel material for use in various construction projects. For a typical operational setup, unprocessed materials are loaded into the primary jaw crusher via front end loaders, transferred to the primary screen where the material is either re-circulated back through the impact crusher/screen or separated and stockpiled. The jaw crusher, impact crusher, and screen deck will be configured as a closed circuit conveyor operation, whereby materials are continuously circulated through process until the desired product diameter is met. Material exiting the circuit are separated and stockpiled.

Concord's initial location for this mineral processing operation was in Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana; otherwise known as the Anderson Pit. The initial location proposed was designated as the operations home-pit.

C. Permit History

On May 23, 2011 Seifert Enterprises, LLC submitted a complete application to operate a portable nonmetallic mineral crushing and screening operation. **MAQP#4666-00** was issued final on August 3, 2011 to Seifert Enterprises, LLC.

On July 26, 2011, the Department of Environmental Quality (Department) received a request to change the permittee name from Seifert Enterprises, LLC (Seifert) to Concord Field Services, LLC. The current permit action is an administrative amendment pursuant to ARM 17.8.764 that changes the permittee name as requested. **MAQP #4666-01** replaced MAQP #4666-00.

On October 17, 2011, the Department received a request from Concord to change the home pit location of the portable nonmetallic mineral processing facility to the Anderson Pit located in Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana. This permit action is an administrative amendment to accommodate Concord's request. **MAQP #4666-02** replaced MAQP #4666-01.

D. Current Permit Action

On May 25, 2012, the Department received a request from Concord for a modification for an addition of an impact crusher with an integral diesel-fired engine/generator and one diesel-fired engine/generator to **MAQP #4666-03**. The current permit action is a modification and updates current permit language, emissions inventory, and provides an updated environmental assessment. MAQP #4666-03 replaces MAQP #4666-02.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associate 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 location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. 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).

Concord shall comply with the 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 (CO)
5. ARM 17.8.213 Ambient Air Quality Standards for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter (PM)
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standards for Lead
10. ARM 17.8.223 Ambient Air Quality Standards for Particulate Matter with an aerodynamic diameter of 10 microns or less (PM₁₀)
11. ARM 17.8.230 Fluoride in Forage

Concord 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, Concord 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 Process. 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 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Concord is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
- b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Concord, the portable crushing equipment to be used under MAQP #4666-03 is subject to this subpart as it meets the definition of an affected facility constructed after August 31, 1983.
- c. 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.

At the request of Concord, this permit is written in a de minimis friendly manner. Therefore, this NSPS may be applicable to the diesel-fired engine/generator.

- 7. 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 (NESHAP) for Source Categories. Concord is considered an NESHAP-affected facility under 40 CFR Part 63 and is 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 (HAP) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary 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 Concord, the RICE equipment to be used under MAQP #4666-03 is potentially subject to this subpart because it may meet the definition of a stationary RICE operating at an area source of HAPs while within their home pit.

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. Concord 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. Concord has a PTE greater than 15 tons per year of PM, oxides of nitrogen (NO_x), and carbon monoxide (CO); 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. Concord 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. Concord submitted an affidavit of publication of public notice for the May 2nd, 2012 issue of *the Sidney Herald*, a newspaper of general circulation in the Town of Culbertson in Roosevelt County.
 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 Best Available Control Technology (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 Concord of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
 10. ARM 17.8.759 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that do not require the preparation of an environmental impact statement.
 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--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 (tpy) 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 tpy of any pollutant;
 - b. PTE > 10 tpy of any single hazardous air pollutant (HAP), PTE > 25 tpy of combined HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tpy of particulate matter with an aerodynamic diameter of 10 microns or less (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 #4666-03 for Concord, the following conclusions were made:
 - a. The facility's allowable PTE is less than 100 tpy for any pollutant.
 - b. The facility's PTE is less than 10 tpy for any single HAP and less than 25 tpy of any combination of HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS standards (40 CFR 60, Subpart A, Subpart OOO, and potentially Subpart IIII).
 - e. This facility is potentially subject to the area source provisions of a current NESHAP standard (40 CFR 63, Subparts A and 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 Concord 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, Concord will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

A BACT analysis was submitted by Concord in permit application #4666-03, addressing some available methods of controlling particulate emissions from the crushing/screening plant. The

Department has reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determinations.

Crushing/Screening Particulate Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing operation. These two control methods are water and/or chemical dust suppressant. Chemical dust suppressant could be used for dust suppression on the area surrounding the crushing operation and for emissions from the crushing operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. Individual circumstances may, however, necessitate the use of chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

In order to maintain compliance with the opacity requirements and reasonable precaution limitations, the Department determined that application of water and/or dust suppressant chemicals using sprays bars constitutes BACT for the crushing/screening operation.

Diesel Engines

Due to the limited amount of emissions produced by the diesel engines and the lack of readily available cost effective add-on controls, add-on controls would be cost prohibitive. Generally, any new diesel engines would likely be required to comply with the federal engine emission limitations including, for example, EPA Tier emission standards for non-road engines (40 CFR 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (4- CFR 60 Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ).

Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance constitutes BACT for these engines. The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Emission Source	tons/year						
	PM	PM ₁₀	PM _{2.5}	NO _x	CO	VOC	SO ₂
2008 Fabtec 3042 Jaw Crusher (350 TPH)	1.84	0.83	0.15	--	--	--	--
1998 Eagle Impact Crusher (350TPH)	1.84	0.83	0.15	--	--	--	--
2007 CCFAB Screen Deck (6x20) (700 TPH)	6.75	2.27	0.15	--	--	--	--
2008 Caterpillar Diesel-Fired Engine/Generator	1.20	1.20	1.20	38.48	21.05	9.22	7.52
1988 Caterpillar Diesel-Fired Engine/Generator (120 hp)	1.16	1.16	1.16	16.29	3.51	1.32	1.08
255 hp Diesel-fired Engine/Generator (part of impact crusher)	2.46	2.46	2.46	34.62	7.46	2.80	2.29
Material Transfer	1.93	0.63	0.18	--	--	--	--
Pile Forming/Bulk Loading	7.25	3.42	0.05	--	--	--	--
Truck Unloading	0.64	0.07	0.06	--	--	--	--
Haul Roads	5.68	1.57	0.16	--	--	--	--
Total Emissions	30.75	14.43	5.72	89.40	32.02	13.34	10.88

** CO = carbon monoxide
 HAPs = hazardous air pollutants
 bhp = brake horsepower
 lb = pound
 N/A = not applicable
 ND = no data available
 NO_x = oxides of nitrogen
 PM = particulate matter
 PM₁₀ = 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_x = oxides of sulfur
 TPH = tons per hour
 TPY = tons per year
 VOC = volatile organic compounds
 yr = year

Crushing Operations		
Hours of Operation	8,760	hrs/yr
<u>2008 Fabtec 3042 Jaw Crusher (350 TPH)</u>		
Process Rate	350	ton/hr
PM Emissions:		
Emission Factor	0.0012	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.84 ton/yr	1.84	ton/yr
PM₁₀ Emissions:		
Emission Factor	0.00054	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 0.83 ton/yr	0.83	ton/yr
PM_{2.5} Emissions:		
Emission Factor	0.0001	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.15 ton/yr	0.15	ton/yr
<u>1998 Eagle Impact Crusher (350TPH)</u>		
Process Rate	350	ton/hr
PM Emissions:		
Emission Factor	0.0012	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.84 ton/yr	1.84	ton/yr
PM₁₀ Emissions:		
Emission Factor	0.00054	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 0.83 ton/yr	0.83	ton/yr
PM_{2.5} Emissions:		
Emission Factor	0.0001	lb/ton
Calculation: (350 ton/hr) * (8760 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.15 ton/yr	0.15	ton/yr
<u>Screening Operation</u>		
Hours of Operation	8,760	hrs/yr
<u>2007 CCFAB Screen Deck (6x20) (700 TPH)</u>		
Process Rate	700	ton/hr

Total PM Emissions:

Emission Factor 0.0022 lb/ton
 Calculation: $(700 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.0022 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 6.75 \text{ ton/yr}$ **6.75** ton/yr

Total PM₁₀ Emissions:

Emission Factor 0.00074 lb/ton
 Calculation: $(700 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00074 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 2.27 \text{ ton/yr}$ **2.27** ton/yr

Total PM_{2.5} Emissions:

Emission Factor 0.00005 lb/ton
 Calculation: $(700 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00005 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 0.15 \text{ ton/yr}$ **0.15** ton/yr

Diesel-Fired Engine Generators**2008 Caterpillar Diesel-Fired Engine Generator**

Generator Size 624.0 kW 837.0 hp
 Hours of Operation 8,760 hrs/yr

PM Emissions:

Emission Factor (Assume PM = PM-10) 2.00E-01 g/kW-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (624.0 \text{ KW}) * (0.2 \text{ g/kW-hr}) * (\text{ton}/2000 \text{ lb}) = 1.20 \text{ ton/yr}$ **1.203** ton/yr

PM₁₀ Emissions:

Emission Factor 2.00E-01 g/kW-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (624.0 \text{ KW}) * (0.2 \text{ g/kW-hr}) * (\text{ton}/2000 \text{ lb}) = 1.20 \text{ ton/yr}$ **1.203** ton/yr

PM_{2.5} Emissions:

Emission Factor 2.00E-01 g/kW-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (624.0 \text{ KW}) * (0.2 \text{ g/kW-hr}) * (\text{ton}/2000 \text{ lb}) = 1.20 \text{ ton/yr}$ **1.203** ton/yr

NO_x Emissions:

Emission Factor 6.4 g/kW-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (624 \text{ KW}) * (6.4 \text{ g/kW-hr}) * (0.0000011 \text{ tons/g}) = 38.48 \text{ ton/yr}$ **38.482** ton/yr

CO Emissions:

Emission Factor 3.50E+00 g/kW-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (624.0 \text{ KW}) * (3.5 \text{ g/kW-hr}) * (\text{ton}/2000 \text{ lb}) = 21.05 \text{ ton/yr}$ **21.045** ton/yr

VOC Emissions:

Emission Factor 2.51E-03 lbs/hp-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (837.0 \text{ hp}) * (0.0025141 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 9.22 \text{ ton/yr}$ **9.22** ton/yr

SO_x Emissions:

Emission Factor 2.05E-03 lbs/hp-hr
 Calculation: $(8,760 \text{ hrs/yr}) * (837.0 \text{ hp}) * (0.00205 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 7.515 \text{ ton/yr}$ **7.52** ton/yr

255 hp Diesel-fired Engine Generator (part of impact crusher)

Generator Size 255 hp
 Hours of Operation 8,760 hrs/yr

PM Emissions (assume PM=PM10= PM2.5):

Emission Factor (Assume PM = PM-10) 2.20E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 2.46 ton/yr
2.46 ton/yr

PM₁₀ Emissions (filterable + condensable):

Emission Factor 2.20E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 2.46 ton/yr
2.46 ton/yr

PM_{2.5} Emissions (filterable):

Emission Factor 2.20E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 2.46 ton/yr
2.46 ton/yr

NO_x Emissions:

Emission Factor 0.031 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 34.62 ton/yr
34.62 ton/yr

CO Emissions:

Emission Factor 6.68E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 7.46 ton/yr
7.46 ton/yr

VOC Emissions:

Emission Factor 2.51E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.00251 lbs/hp-hr) * (ton/2000 lb) = 2.80 ton/yr
2.80 ton/yr

SO₂ Emissions:

Emission Factor 2.05E-03 lbs/hp-hr
Calculation: (255 hp) * (8,760 hrs/yr) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 2.29 ton/yr
2.29 ton/yr

1988 Caterpillar Diesel-Fired Engine Generator (120 hp)

Generator Size 120.0 hp
Hours of Operation 8,760 hrs/yr

PM Emissions:

Emission Factor (Assume PM = PM-10) 2.20E-03 lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 1.16 ton/yr
1.16 ton/yr

PM₁₀ Emissions:

Emission Factor 2.20E-03 lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 1.16 ton/yr
1.16 ton/yr

PM_{2.5} Emissions:

Emission Factor 2.20E-03 lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 1.16 ton/yr
1.16 ton/yr

NO_x Emissions:

Emission Factor	0.031	lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 16.29 ton/yr	16.29	ton/yr

CO Emissions:

Emission Factor	6.68E-03	lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 3.51 ton/yr	3.51	ton/yr

VOC Emissions:

Emission Factor	2.51E-03	lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 1.32 ton/yr	1.32	ton/yr

SO_x Emissions:

Emission Factor	2.05E-03	lbs/hp-hr
Calculation: (120 hp) * (8,760 hrs/yr) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 1.08 ton/yr	1.08	ton/yr

Material Transfer

Process Rate	1,050	ton/hr
Hours of Operation	8,760	hrs/yr
Number of Transfers	3	transfers

Total PM Emissions:

Emission Factor	0.00014	lb/ton
Calculation: (1,050 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (3 transfer) = 1.93 ton/yr	1.93	ton/yr

Total PM₁₀ Emissions:

Emission Factor	4.60E-05	lb/ton
Calculation: (1,050 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (3 transfer) = 0.63 ton/yr	0.63	ton/yr

Total PM_{2.5} Emissions:

Emission Factor	1.30E-05	lb/ton
Calculation: (1,050 ton/hr) * (8760 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (3 transfer) = 0.18 ton/yr	0.18	ton/yr

Pile Forming/Bulk Loading

Process Rate	500	ton/hr
Hours of Operation	8,760	hrs/yr
Number of Piles	1	piles

PM Emissions:

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00331$ lb/ton	0.00331	lb/ton
Where: k = particle size multiplier	0.74	
U = mean wind speed	9.33	mph
M = material moisture content	2.10	%
Control Efficiency	0	%
Calculation: (500 ton/hr) * (8760 hrs/yr) * (0.00331 lb/ton) * (ton/2000 lb) * (1 piles) = 7.25 ton/yr	7.25	ton/yr
Calculation: (500 ton/hr) * (8760 hrs/yr) * (0.00331 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 0/100) = 7.25 ton/yr	7.25	ton/yr

PM₁₀ Emissions:

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00156 \text{ lb/ton}$	0.00156	lb/ton
Where: k = particle size multiplier	0.35	
U = mean wind speed	9.33	mph
M = material moisture content	2.10	%
Control Efficiency	0	%
Calculation: $(500 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00156 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ piles}) =$ 3.42 ton/yr	3.42	ton/yr
Calculation: $(500 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00156 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ piles}) * (1 - 0/100) = 3.42 \text{ ton/yr}$	3.42	ton/yr

PM_{2.5} Emissions:

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00002 \text{ lb/ton}$	0.00002	lb/ton
Where: k = particle size multiplier	0.053	
U = mean wind speed	9.33	mph
M = material moisture content	2.10	%
Control Efficiency	0	%
Calculation: $(500 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00002 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ piles}) =$ 0.05 ton/yr	0.05	ton/yr
Calculation: $(500 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00002 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ piles}) * (1 - 0/100) = 0.05 \text{ ton/yr}$	0.05	ton/yr

Truck Unloading

Process Rate	1,050	ton/hr
Hours of Operation	8,760	hrs/yr
Number of Loads	1	Load(s)

Total PM Emissions:

Emission Factor	0.00014	lb/ton
Calculation: $(1,050 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00014 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ Loads}) = 0.64 \text{ ton/yr}$ (AP 42, Table 11.19.2-2, 8/04)	0.64	ton/yr

Total PM₁₀ Emissions:

Emission Factor	1.60E-05	lb/ton
Calculation: $(1,050 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.000016 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ Loads}) = 0.07 \text{ ton/yr}$ Used Truck unloading Fragmented Stone	0.07	ton/yr

Total PM_{2.5} Emissions:

Emission Factor	1.30E-05	lb/ton
Calculation: $(1,050 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.000013 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (1 \text{ Loads}) = 0.06 \text{ ton/yr}$ (AP 42, Table 11.19.2-2, 8/04)	0.06	ton/yr

Haul Roads

Vehicle Miles Traveled	5	VMT/day
VMT per Hour	0.21	VMT/hr
Hours of Operation	8,760	hrs/yr

PM Emissions:

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 12.46 \text{ lb/VMT}$	12.46	lb/VMT
Where: k = constant	4.9	lbs/VMT
s = surface silt content	7.1	%
W = mean vehicle weight	54	tons
a = constant	0.7	
b = constant	0.45	
Control Efficiency	50	%
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (12.46 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) = 11.37 \text{ tons/yr}$	11.37	tons/yr
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (12.46 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) * (1 - 50/100) = 5.68 \text{ tons/yr}$	5.68	tons/yr

PM₁₀ Emissions:

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 3.43 \text{ lb/VMT}$	3.43	lb/VMT
Where: k = constant	1.5	lbs/VMT
s = surface silt content	7.1	%
W = mean vehicle weight	54	tons
a = constant	0.9	
b = constant	0.45	
Control Efficiency	50	%
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (3.43 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) = 3.13 \text{ tons/yr}$	3.13	tons/yr
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (3.43 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) * (1 - 50/100) = 1.57 \text{ tons/yr}$	1.57	tons/yr

PM_{2.5} Emissions:

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 0.34 \text{ lb/VMT}$	0.34	lb/VMT
Where: k = constant	0.15	lbs/VMT
s = surface silt content	7.1	%
W = mean vehicle weight	54	tons
a = constant	0.9	
b = constant	0.45	
Control Efficiency	50	%
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (0.34 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) = 0.31 \text{ tons/yr}$	0.31	tons/yr
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (0.34 \text{ lb/VMT}) * (\text{ton}/2000 \text{ lb}) * (1 - 50/100) = 0.16 \text{ tons/yr}$	0.16	tons/yr

V. Existing Air Quality

MAQP #4666-03 is for a portable crushing and screening operation to be initially located in Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana. This facility would be allowed to operate at this proposed site, and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS).

VI. Air Quality Impacts

MAQP #4666-03 applies while operating at any location within Montana, excluding those areas having a Department-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas.

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

The Department determined that the impact from this permitting action will be minor and is not expected to cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined that there will be minor impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

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

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

IX. Environmental Assessment

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

Analysis prepared by: T. Love

Date: June 5, 2012

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: Concord Field Services, LLC
P.O. Box 1077
Shelby, MT 59474

Montana Air Quality Permit Number (MAQP): 4666-03

Preliminary Determination Issued: June 29, 2012

Department Decision Issued: July 31, 2012

Permit Final: August 16, 2012

1. *Legal Description of Site:* Concord operates a portable non-metallic mineral crushing and screening operation, with a designated home-pit located in Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana. However, MAQP #4666-03 applies while operating at any location in Montana, except those areas having a Department-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum would be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.
2. *Description of Project:* The current action is a modification for an addition of an impact crusher with an integral diesel-fired engine/generator and one diesel-fired engine/generator to Concord's existing crushing/screening facility.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of MAQP #4666-03 would allow Concord to operate the permitted equipment at various locations throughout Montana (as described above).
4. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Concord 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 listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in MAQP #4666-03.
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 the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would 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.

		<i>Major</i>	<i>Moderate</i>	<i>Minor</i>	<i>None</i>	<i>Unknown</i>	<i>Comments Included</i>
<i>A</i>	<i>Terrestrial and Aquatic Life and Habitats</i>			<i>X</i>			<i>Yes</i>
<i>B</i>	<i>Water Quality, Quantity, and Distribution</i>			<i>X</i>			<i>Yes</i>
<i>C</i>	<i>Geology and Soil Quality, Stability and Moisture</i>			<i>X</i>			<i>Yes</i>
<i>D</i>	<i>Vegetation Cover, Quantity, and Quality</i>			<i>X</i>			<i>Yes</i>
<i>E</i>	<i>Aesthetics</i>			<i>X</i>			<i>Yes</i>
<i>F</i>	<i>Air Quality</i>			<i>X</i>			<i>Yes</i>
<i>G</i>	<i>Unique Endangered, Fragile, or Limited Environmental Resources</i>			<i>X</i>			<i>Yes</i>
<i>H</i>	<i>Demands on Environmental Resource of Water, Air and Energy</i>			<i>X</i>			<i>Yes</i>
<i>I</i>	<i>Historical and Archaeological Sites</i>				<i>X</i>		<i>Yes</i>
<i>J</i>	<i>Cumulative and Secondary Impacts</i>			<i>X</i>			<i>Yes</i>

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

This permitting action would be expected to have a minor effect on terrestrial and aquatic life and habitats, as the proposed project would affect an existing mining site. Current permit acreage is 134 acres, with currently 35 acres under disturbance, 15 acres under reclamation, and 84 acres undisturbed. Maximum disturbed acreage at one time would be 50 acres. Furthermore, the air emissions would likely have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of the operations (see Section 7.F of this EA) and would have intermittent and seasonal operations. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and general facility area. This water use would be expected to only cause minor, if any, impacts to water resources because the proposed project is small and only a small, additional volume of water would be required to be used. The site is in an existing mining site and there are no wetlands within 800 feet of the mining site. Disturbed ground would drain to areas contained by earth and/or scoria berms to allow for percolation into sub-soils prior to surface flow. At final reclamation, original drainage patterns would be maintained and no discharges are proposed to occur from the existing site. Therefore, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #4666-03, any impacts from deposition of pollutants on water quality, quantity, and distribution expected would be minor from the current permit action.

C. Geology and Soil Quality, Stability, and Moisture

Scoria bedrock outcrops 2-4 acres in the area with overlying sandy sediments such as sandstone and siltstone. Overburden may include thick sequences of sandy substrate with moderate clay content. The top soils are rich in organic material, although poorly developed

and deeply incised on steep slopes. The site is used as open graze land by the landowner, Anderson Diamond Ranch Inc. Minor impacts from deposition of air pollutants on soils would likely result (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would likely occur. Since only minor amounts of pollution would be expected from the current permitting action and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

This site might be characterized as open grassy hills and valleys. Vegetation is primarily grassland habitat with mostly Agropyron species including Western and Slender wheatgrass, Thick-spike wheatgrass, Green needlegrass, Sideoats grama, and Prairie sandreed. Tree species include Cedar, Juniper, Ash, and Oak stands in the drainage bottom draining south. During operations, the proposed project would likely be a relatively minor source of emissions and the pollutants widely dispersed (as described in Section 7.F of this EA); therefore, deposition on vegetation from the project would expect to be minor. Also, due to a limited increase in water usage from this permitting action (as described in Section 7.B of this EA) and minimal associated soil disturbance from the application of water and water runoff (as described in Section 7.C of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The nearest residence is two miles north from the proposed project site. Noise levels immediate to crushing equipment may approach 95 decibals, while noise levels of rock processing equipment and front end loaders may approach 90 decibals. The additional crusher would be visible and would create noise while operating at the proposed site. However, MAQP #4666-03 would include conditions to control emissions, including visible emissions, from the plant. The facility is portable and operates on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be short-lived and are expected to be minor.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because an increase in air pollutants would be relatively small and the proposed project would operate on an intermittent and temporary basis. MAQP #4666-03 includes conditions limiting the facility's opacity; requires water and water spray bars be available on site and used to ensure compliance with opacity standards.

Further, the Department determined that this proposed project would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit is limited to below the major source threshold level of 100 TPY for any regulated pollutant. Pollutant deposition from the facility would expect to be minimal because the pollutants emitted are widely dispersed (from factors such as wind speed and wind direction) and exhibit minimal deposition on the surrounding area. Therefore, air quality impacts from operating the proposed project in this area would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed area of operation (Section 8, Township 27 North, Range 57 East within Roosevelt County, Montana) contacted the Natural Resource Information System – Montana Natural Heritage Program. Search results concluded there is one species of concern within the area. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional one (1) mile buffer. The known species of concern includes a single vertebrate animal: the Whooping Crane (Endangered).

While this species may be found within the search area, the Whooping Crane is a migratory animal and will likely have access to many miles of potential habitat. Furthermore, the Whooping Crane is known to inhabit wetland areas, which are not impacted by the operation of this facility. The site is also grazed by mule eared and white tailed deer. Shrub and tree habitat in the bottom drainages support a number of other bird species as well. These areas would not be disturbed. Specific effects of operating the proposed project in this area would be minor since the project is relatively small in size and located within an existing construction area. In addition the source will have only seasonal and intermittent operations in the area. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

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

Due to the relatively small size of the proposed project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the proposed project would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Overall, any impacts to water, air, and energy resources would likely be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be disturbed due to the current permitting action. Search results concluded that as long as there will be no new ground disturbance or any alteration to structures over fifty years of age, there is a low likelihood cultural properties will be impacted.

Therefore, a recommendation for a cultural resource inventory is unwarranted at this time.

J. Cumulative and Secondary Impacts

The current permitting action would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the action cause a minor increase in the amount of emissions being released into the environment. Emissions and noise generated from the equipment would likely result in only minor impacts to the area of operations because the operation of the crushing facility would be seasonal and temporary. The proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely 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.*

		<i>Major</i>	<i>Moderate</i>	<i>Minor</i>	<i>None</i>	<i>Unknown</i>	<i>Comments Included</i>
<i>A</i>	<i>Social Structures and Mores</i>				<i>X</i>		<i>Yes</i>
<i>B</i>	<i>Cultural Uniqueness and Diversity</i>				<i>X</i>		<i>Yes</i>
<i>C</i>	<i>Local and State Tax Base and Tax Revenue</i>			<i>X</i>			<i>Yes</i>
<i>D</i>	<i>Agricultural or Industrial Production</i>			<i>X</i>			<i>Yes</i>
<i>E</i>	<i>Human Health</i>			<i>X</i>			<i>Yes</i>
<i>F</i>	<i>Access to and Quality of Recreational and Wilderness Activities</i>				<i>X</i>		<i>Yes</i>
<i>G</i>	<i>Quantity and Distribution of Employment</i>				<i>X</i>		<i>Yes</i>
<i>H</i>	<i>Distribution of Population</i>				<i>X</i>		<i>Yes</i>
<i>I</i>	<i>Demands for Government Services</i>			<i>X</i>			<i>Yes</i>
<i>J</i>	<i>Industrial and Commercial Activity</i>			<i>X</i>			<i>Yes</i>
<i>K</i>	<i>Locally Adopted Environmental Plans and Goals</i>			<i>X</i>			<i>Yes</i>
<i>L</i>	<i>Cumulative and Secondary Impacts</i>			<i>X</i>			<i>Yes</i>

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

A. Social Structures and Mores

The current permitting action would expect to cause no disruption to the social structures and mores in the area because the proposed project would be a minor increase of emissions and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4666-03, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not likely be impacted by the operation of the proposed project because the facility is a portable source, with seasonal and intermittent operations. Therefore, there would not be any impacts expected to the cultural uniqueness and diversity of this.

C. Local and State Tax Base and Tax Revenue

The operation of the proposed project would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations. Five miners and up to 20 truck drivers would be employed at the mine site. Thus, only minor impacts to the local and state tax base and revenue would be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The operation of the proposed project would have only a minor impact on local industrial production since the facility would be a minor source of air emissions. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F

of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the proposed project operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #4666-03 would incorporate conditions to ensure that the proposed project would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the air emissions from the proposed project would be minimized by the use of water spray and other operational limits that would be required by MAQP #4666-03. Also, the proposed project would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

Based on information received from Concord, no recreational activities or wilderness areas are near the proposed project site. Therefore, no impacts to the access to and quality of recreational and wilderness activities are anticipated.

G. Quantity and Distribution of Employment

The proposed project would not require a significant increase in employees and would have seasonal and intermittent operations. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

No individuals would be expected to permanently relocate to this area of operation as a result of the proposed project. Therefore, the proposed project would not likely impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

Minor or no increases would be expected in traffic on existing roadways in the area while the proposed project is being operated. In addition, government services would 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 expect to be minor.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected.

K. Locally Adopted Environmental Plans and Goals

Concord would be allowed, by MAQP #4666-03, to operate in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #4666-03 contains operational restrictions for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed project would be a portable source and would likely have intermittent and seasonal operations, any impacts from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The proposed project would cause only minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the proposed project is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this proposed project may be operated in conjunction with other equipment owned and operated by Concord, but any cumulative impacts upon the social and economic aspects of the human environment would likely be minor and short-lived. Thus, only minor and temporary cumulative effects would be expected to the local economy.

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; MAQP #4666-03 provides conditions and limitations to ensure the facility would 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

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