February 13, 2019

Capital Concrete Inc.
5022 Hwy. 12 East
East Helena, MT 59635

Dear Mr. Chatriand:

Montana Air Quality Permit #5220-00 is deemed final as of February 13, 2019, by the Department of Environmental Quality (Department). All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

Craig Henrikson, P.E.
Environmental Engineer
Air Quality Bureau
(406) 444-6711

JM:CH
Enclosures

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #5220-00

Capital Concrete Inc.
5022 Hwy. 12 East
East Helena, MT 59635

February 13, 2019

MONTANA AIR QUALITY PERMIT

Issued to: Capital Concrete
5022 Hwy. 12 East
East Helena, MT 59635

MAQP: #5220-00
Application Complete: 12/03/2018
Preliminary Determination Issued: 01/07/2019
Department's Decision Issued: 01/28/2019
Permit Final: 02/13/2019

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

Section I: Permitted Facilities

A. Permitted Equipment

Capital is proposing to operate a wash facility which would include conveyors, a screening wash plant, storage piles of raw material and finished washed products, and a 449 horsepower (hp) engine with associated generator, and associated equipment. This permit is written in a de minimis friendly manner, and equipment which provides similar function may be operated as replacements under the de minimis rule.

- 3-Deck Wash Plant rated for up to 350 tons per hour (tph)
- Conveyors rated for up to 350 tph
- Storage Piles: Formation and Load Out
- Up to 449-hp diesel engine/generator set
- Associated equipment

B. Plant Location

Capital is proposing to operate a wash plant located in Section 17, Township 8N, Range 1E in Broadwater County. However, MAQP #5220-00 would apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *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 PM_{10} nonattainment areas.

Section II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions shall not exhibit an opacity in excess of the following levels averaged over 6 consecutive minutes:

a. For New Source Performance Standard (NSPS)-affected screens and conveyors that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity. For applicability purposes, it is assumed the conveyors were constructed after 1983 but prior to 2008 (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

b. Any fugitive emissions from the source or from any material transfer operations, including, but not limited to, truck loading or unloading, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

2. Capital 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).

3. Capital 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.2 (ARM 17.8.749 and ARM 17.8.752).

4. The maximum rated capacity of the wash plant shall not exceed 350 tph (ARM 17.8.749).

5. If the permitted equipment is used in conjunction with any other equipment owned or operated by Capital, 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).

6. Capital shall not operate or have on-site more than one diesel engine/generator. The maximum capacity of the engine that drives the generator shall not exceed 449 hp (ARM 17.8.749).

7. Capital 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).

8. Capital shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

9. Capital shall install, operate, and maintain the emission control equipment and practices to provide the maximum air pollution control for which it was designed (ARM 17.8.752).

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 (ARM 17.8.340, 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 of Environmental Quality (Department) may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

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

2. Capital 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 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 to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Capital 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. All records compiled in accordance with this permit must be maintained by Capital 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. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

5. Capital 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).

6. All records compiled in accordance with this permit must be maintained by Capital 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. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – Capital 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 such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Capital 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 action as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Capital 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. Capital 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 Analysis
Capital Concrete, Inc.
MAQP #5220-00

I. Introduction/Process Description

Capital is proposing to operate a wash plant which would include conveyors, a screening wash plant, storage piles of raw material and finished washed products, and a 449 horsepower (hp) engine with associated generator, and associated equipment.

A. Permitted Equipment

- 3-Deck Wash Plant rated for up to 350 tons per hour (tph)
- Conveyors rated for up to 350 tph
- Storage Piles: Formation and Load Out
- Up to 449-hp diesel engine/generator set
- Associated equipment

B. Source Description

Capital proposes to operate a wash plant located at an existing industrial gravel site separating material in a 3-deck wet screen, fed by a series of conveyors and washed and screened into different size material storage piles.

C. Response to Public Comments (none received)

Person/Group Commenting	Permit Reference	Comment	Department Response

II. Applicable Rules and Regulations

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

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

1. 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).

   Capital 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 the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}
11. ARM 17.8.230 Fluoride in Forage

Capital 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, Capital 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, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

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

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

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Capital 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 nonmetallic mineral 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 Capital, the portable equipment to be used under MAQP #5220 is subject to this subpart because the facility has conveyors assumed to be constructed after August 31, 1983 but prior to 2008. Subpart OOO does not apply to operations where the material being processed is saturated with water but conveyor operations upstream of the washing process are covered under Subpart OOO. Additionally, if the screens and downstream conveyors are used with dry materials, Subpart OOO would apply.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

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

   b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Capital, the RICE equipment to be used under this permit may be subject to this subpart because they are an area source of HAP emissions and the engine may remain at the location for more than 12 consecutive months.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.402 Requirements. Capital must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP).

E. 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. Capital 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. The air quality 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 prorate 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 person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year (tpy) of any pollutant. Capital has a PTE greater than 25 tpy for oxides of nitrogen (NOx) and particulate matter (PM).

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. Capital 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. Capital submitted an affidavit of publication of public notice for the December 6, 2018, issue of the *Broadwater Reporter*, a newspaper of general circulation in the Town of Townsend in Broadwater County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Capital 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 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.

12. 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.

13. 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).

14. 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.

15. ARM 17.8.765 Transfer of Permit. 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.

G. 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 current permit action does not constitute a major source or major modification. Therefore, the requirements of this subchapter do not apply.

H. ARM 17.8, Subchapter 10 – Preconstruction Permit Requirements for Major Stationary Sources of Modifications Located Within Attainment or Unclassified Areas, including, but not limited to:

ARM 17.8.1004 When Air Quality Preconstruction Permit Required. This current permit action does not constitute a major source or major modification. Therefore, the requirements of this subchapter do not apply.

I. 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 source having:

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

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

c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (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 #5220-00 for Capital, the following conclusions were made:

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

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

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

d. This facility is subject to NSPS 40 CFR 60 OOO for operations where material is not saturated with water

e. This facility may be subject to NESHAP 40 CFR 63 ZZZZ.

f. This source is not a Title IV affected source, or a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Capital is a minor source of emissions and therefore, is not subject to the Title V Operating Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source may be subject to the Title V Operating Permit Program.

III. BACT Determination

A BACT determination is required for each new or modified source. Capital 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. Capital provided the following information for the BACT analysis.

Wash Plant and Material Handling Operations

For particulate matter fugitive emissions, Capital has indicated that either chemical dust suppressant or water as dust suppressant are equally effective for fugitive control. For non-NSPS affected equipment, Capital uses water to stay below the 20% opacity limit required by ARM 17.8.304 and proposes to additionally use water to meet the more stringent opacity limits required under NSPS Subpart OOO. Proposed BACT limits by equipment and the associated regulatory reference are shown in the table.

Emission Unit	Year Constructed	Opacity Limit	Reference
Feed Belt Conveyor	Between 1983 and 2008	10%	40 CFR 60 Subpart OOO
Associated Equipment	-	20%	ARM 17.8.304(2)

BACT for the Diesel-Fired Engine

The proposed portable engine generator will emit criteria pollutants through its stack. The engine will emit nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter, particulate matter less than 10 microns, and particulate matter less than 2.5 microns ($PM/PM_{10}/PM_{2.5}$), and volatile organic compounds (VOC).

Emissions of SO2 from the engine depend on the amount of sulfur in the fuel combusted by the engine. Limiting the sulfur content of the fuel controls emissions of SO_2. Capital proposes that BACT for SO_2 is to combust only ultra-low-sulfur diesel fuel ($S \leq 15$ ppm) in the engine. Ultra-low sulfur diesel is the only diesel fuel commercially available.

The engine will also emit NOx, CO, $PM/PM_{10}/PM_{2.5}$, and VOC. Due to the costs involved in retrofitting the engine with additional pollution controls, the nature of the operation and other similar operations that operate portable engine generators without additional add-on controls, Capital proposes that operating and maintaining the engine in accordance with good air pollution control techniques constitutes BACT for the generator engine. The engine will be operated and maintained as a portable source. If the engine generator remains at one location for more than 12 months, it will become subject to the applicable requirements in 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and any applicable emission limitations, performance testing, recordkeeping and reporting requirements would then apply.

Fugitive Haul Road Emissions

Capital must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating 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. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

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

The summary of the emission inventory is included below.

Capital Concrete Inc.

	Emissions Tons/Year [PTE]							
Emission Source	PM	PM_{10}	$PM_{2.5}$	$PM_{Cond.}$	CO	NO_x	SO_2	VOC
Truck Unloading (Assume all material is unloaded that can be processed in Screen)	0.02	0.02	0.02					
Screen	0.03	0.01	0.00					
Conveyors	1.50	0.49	0.14					
Pile Formation	15.19	7.19	1.09					
Truck Loading (Assume all material is eventually loaded)	0.21	0.07	0.07					
Diesel Generator (449 hp)	4.33	4.33	4.33	0.11	13.14	60.97	4.03	4.94
Unpaved Roadways (Haul Roads)	5.49	1.51	0.15					
EMISSIONS (Excluding Haul Roads)	24.26	13.45	5.90	0.11	13.14	60.97	4.03	4.94

** CO = carbon monoxide
(fil) = filterable
HAPs = hazardous air pollutants
hp = horsepower
lb = pound
N/A = not applicable
ND = no data available
NOX = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_2 = sulfur dioxide
TPH = tons per hour
TPY = tons per year
VOC = volatile organic compounds
yr = year

Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours).

Capital City Concrete Inc.

Truck Unloading (Assume all material is unloaded that can be processed in the Screen) SCC 3-05-020-31)					
Process Rate:	350.0	ton/hr			
Operating Hours	8760	hours/year			
PM Emissions:					
Emission Factor	0.000016	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000016 lbs/ton) * (350.00 ton/hour) =			0.01	lbs/hr
	(0.01 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.02	TPY
PM_{10} Emissions:					
Emission Factor	0.000016	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000016 lbs/ton) * (350.00 ton/hour) =			0.01	lbs/hr
	(0.01 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.02	TPY
$PM_{2.5}$ Emissions:					
Emission Factor	0.000016	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000016 lbs/ton) * (350.00 ton/hour) =			0.01	lbs/hr
	(0.01 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.02	TPY
Screening (SCC 3-05-020-06)					
Process Rate:	350	ton/hr	(Three-Deck Screen)		
Operating Hours	8760	hours/year	Screening Max	3066000.00	ton/yr
PM Emissions:			(Screening controlled)		
Emission Factor	0.00220	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.0022 lbs/ton) * (350.00 ton/hour) =			0.77	lbs/hr
	(0.77 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			3.37	TPY
	99% Control			0.03	
PM_{10} Emissions:					
Emission Factor	0.00074	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00074 lbs/ton) * (350.00 ton/hour) =			0.26	lbs/hr

	(0.26 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.13	TPY
	99% Control			0.01	

$PM_{2.5}$ Emissions:

Emission Factor	0.00005	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00005 lbs/ton) * (350.00 ton/hour) =			0.02	lbs/hr
	(0.02 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.08	TPY
	99% Control			0.00	

Conveyor Transfer Points (Assume 7 Transfer Point that are Controlled) SCC 3-05-020-06

Process Rate:	2450	ton/hr			
Operating Hours	8760	hours/year			
PM Emissions:			(Conveyor Transfer Points)		
Emission Factor	0.00014	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00014 lbs/ton) * (2,450.00 ton/hour) =			0.34	lbs/hr
	(0.34 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.50	TPY

PM_{10} Emissions:

Emission Factor	0.000046	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000046 lbs/ton) * (2,450.00 ton/hour) =			0.11	lbs/hr
	(0.11 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.49	TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.000013	lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000013 lbs/ton) * (2,450.00 ton/hour) =			0.03	lbs/hr
	(0.03 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.14	TPY

Pile Formation (Assume equipment thru- put is crusher total capacity)

			# Piles (2 per application)			
Process Rate:	350	ton/hr	Equation 1 from AP-42 Sec 13.2.4.3 11/06			
Operating Hours	8760	hrs/year	U = wind speed miles per hour	9.3	(Application)	
			k = particle size multiplier	0.74	AP-42 Sec 13.2.4-3 11/06	
PM Emissions:			M = Moisture content %	2.1	Application, Ap-42, Table 13.2.4-1)	
Emission Factor	0.00496	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4			
Calculations	(0.00496 lbs/ton) * (350.00 ton/hour) =				1.73	lbs/hr
	(1.73 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				7.60	TPY
			# of Piles	2	15.19	TPY
			Equation 1 from AP-42 Sec 13.2.4.3 11/06			
			U = wind speed miles per hour	9.3	9.30	(Application)
			k = particle size multiplier	0.35	0.35	AP-42 Sec 13.2.4-3 11/06

PM_{10} Emissions:			M = Moisture content %	2.1		2.10	Application, Ap-42, Table 13.2.4-1)
Emission Factor	0.00234	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4				
Calculations	(0.00234 lbs/ton) * (350.00 ton/hour) =				0.82	lbs/hr	
	(0.82 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				3.59	TPY	
			# of Piles	2	7.19	TPY	
$PM_{2.5}$ Emissions:			Equation 1 from AP-42 Sec 13.2.4.3 11/06				
			U = wind speed miles per hour	9.3	8.15		(Typical Value)
			k = particle size multiplier	0.053	0.35		AP-42 Sec 13.2.4-3 11/06
			M = Moisture content %	2.1	2.10		Application, Ap-42, Table 13.2.4-1)
Emission Factor	0.00035	lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4				
Calculations	(0.00035 lbs/ton) * (350.00 ton/hour) =				0.12	lbs/hr	
	(0.12 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =				0.54	TPY	
			# of Piles	2	1.09	TPY	

Truck Loading (Assume all material is eventually loaded)

			Modeled as Truck Loading Conveyor	
Process Rate:	350	ton/hr		
Operating Hours	8760	hours/year		
PM Emissions:				
Emission Factor	0.00014	lbs/ton	[AP-42 Table 11.19.2-2 8/04]	
PM_{10} Emissions:				
Emission Factor	0.000046	lbs/ton	[AP-42 Table 11.19.2-2 8/04]	
Calculations	(0.000046 lbs/ton) * (350.00 ton/hour) =			0.02 lbs/hr
	(0.02 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			0.07 TPY

Diesel Generator (449 hp) SCC 2-02-004-01

Engine Rating:	449	hp		
Operating Hours:	8760	hrs/yr		
Fuel Input	3.143	MMbtu/hr	BSFC = 7,000 BTU/hp-hr (AP42 Table 3.3-1 10/96)	
	22.942	gallons/hr	(137,000 BTU/gal)	
Particulate Emissions:				
PM Emissions:				
Emission Factor	0.002	lb/hp-hr	[AP-42 Table 3.3-1]	
Calculations	(0.0022 lb/hp-hr) * (449 hp) =			0.99 lbs/hr
	(0.99 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =			4.33 TPY

PM_{10} Emissions:

Emission Factor	0.002	lb/hp-hr	[AP42 Table 3.3-1]	
Calculations	(0.0022 lb/hp-hr) * (449 hp) =		0.99	lbs/hr
	(0.99 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		4.33	TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor	0.002	lb/hp-hr	[AP42 Table 3.3-1]	
Calculations	(0.0022 lb/hp-hr) * (449 hp) =		0.99	lbs/hr
	(0.99 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		4.33	TPY

$PM_{2.5}$ Emissions (condensable):

Emission Factor	0.008	MMBtu	[AP-42 3.4-1, 10/96]	
Calculations	(0.0077 lb/MMBtu) * (3.143 MMBtu/hr) =		0.02	lbs/hr
	(0.02 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		0.11	TPY

CO Emissions:

Emission Factor	0.007	lb/hp-hr	[AP-42 Table 3.3-1]	
Calculations	(0.00668 lb/hp-hr) * (449 hp) =		3.00	lbs/hr
	(3.00 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		13.14	TPY

NOx Emissions:

Emission Factor	0.031	lb/hp-hr	(AP-42 Table 3.3-1)	
Calculations	(0.031 lb/hp-hr) * (449 hp) =		13.92	lbs/hr
	(13.92 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		60.97	TPY

SO_x Emissions:

Emission Factor	0.002	lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0021 lb/hp-hr) * (449 hp) =		0.92	lbs/hr
	(0.92 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		4.03	TPY

VOC Emissions:

Emission Factor	0.003	lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0025 lb/hp-hr) * (449 hp) =		1.13	lbs/hr
	(1.13 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		4.94	TPY

Unpaved Roadways (Haul Roads)

Emission Factor	EF = k(s/12)^a * (W/3)^b		[AP-42 13.2.2.2, 11/06]
	EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)		
	k, Empirical Constant PM =	4.9	[AP-42 Table 13.2.2-2, 11/06]
	k, Empirical Constant PM_{10} =	1.5	[AP-42 Table 13.2.2-2, 11/06]
	k, Empirical Constant $PM_{2.5}$ =	0.15	[AP-42 Table 13.2.2-2, 11/06]
	s, Surface Material Silt Content (%) =	7.1	[AP-42 Table 13.2.2-1, 11/06]
	W, Mean Vehicle Weight (tons) =	50	[Estimated]
	a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
	a, Empirical Constant PM_{10} and $PM_{2.5}$ =	0.9	[AP-42 Table 13.2.2-2, 11/06]
	b, Empirical Constant PM , PM10 and $PM_{2.5}$ =	0.45	[AP-42 Table 13.2.2-2, 11/06]

PM Emissions(uncontrolled): PM30

Emission Factor	EF = 4.9 * (7.1/12)^0.7 * (50/3)^0.45 =	12.036	lbs/VMT		
Calculations	(12.04 lbs/VMT) * (5 miles/day) =			60.18	lbs/day
	(60.18 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			10.98	TPY
	50% Control Efficiency			5.49	TPY

PM_{10} Emissions(uncontrolled):

Emission Factor	EF = 1.5 * (7.1/12)^0.9 * (50/3)^0.45 =	3.31736	lbs/VMT		
Calculations	(3.32 lbs/VMT) * (5 miles/day) =			16.59	lbs/day
	(16.59 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			3.03	TPY
	50% Control Efficiency			1.51	TPY

$PM_{2.5}$ Emissions(uncontrolled):

Emission Factor	EF = 0.15 * (7.1/12)^0.9 * (50/3)^0.45 =	0.33174	lbs/VMT		
Calculations	(0.33 lbs/VMT) * (5 miles/day) =			1.66	lbs/day
	(1.66 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			0.30	TPY
	50% Control Efficiency			0.15	TPY

V. Existing Air Quality

MAQP #5220-00 is issued for the operation of a wash plant and associated equipment initially located in Broadwater County, Montana. As the wash plant will be operated in an existing pit generally intermittently and seasonally, operation of the equipment is not expected to degrade air quality. The operation of the diesel-fired engine and associated generator will also only occur when there is need to produce aggregate products.

VI. Ambient Air Quality Impact Analysis

The Department determined that the impacts from this permitting action will be minor as the wash plant will be located in an existing pit without air quality concerns. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

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

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

Analysis Prepared By: Craig Henrikson
Date: December 17, 2018

DEPARTMENT OF ENVIRONMENTAL QUALITY
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Capital Concrete Inc.

Montana Air Quality Permit number (MAQP): 5220-00

EA Draft: 01/07/2019
EA Final: 01/28/2019
Permit Final: 02/13/2019

1. *Legal Description of Site:* Capital Concrete Inc. (Capital) is proposing to initially operate in Section 17, Township 8N, Range 1E in Broadwater County.

2. *Description of Project:* Capital is proposing to operate a portable wash plant with a three-deck wet screen, engine and associated generator, conveyors and associated equipment. Material will be moved from a stockpile via wheeled loader, and dropped into a feed hopper, supplying a feed belt and conveyors where it is fed into the 3-deck wet screen where material is washed and sized. The sized materials each form a product stockpile. A complete list of the permitted equipment is included in Section I.A of the permit analysis.

3. *Objectives of Project:* The objective of the project would be to produce business and revenue through the sale and use of the various sized washed materials. The issuance of MAQP #5220-00 would allow Capital to operate the permitted equipment at various locations throughout Montana (as described above) including the proposed initial site location.

4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the MAQP to the facility. However, the Department does not consider the "no action" alternative to be appropriate because Capital is required to follow compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no action" alternative was eliminated from further consideration.

5. *A listing of mitigation, stipulations, and other controls:* A list of enforceable conditions, including a BACT analysis, would be included in Montana Air Quality Permit (MAQP) #5220-00.

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

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

A. Terrestrial and Aquatic Life and Habitats

The proposed action would have a minor effect on terrestrial and aquatic life and habitats, as the initial project location would be located in an existing industrial property which has already been disturbed and is currently permitted as an Opencut mine site. Further, the proposed action, does not require additional disturbance. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. Water Quality, Quantity, and Distribution

This facility would have little or no effect on the water quality, water quantity, and distribution, as the proposed equipment will initially be operating in an existing pit. Therefore, the project would have minor, if any, impacts to water quality, quantity or distribution in the area.

C. Geology and Soil Quality, Stability, and Moisture

This permitting action would have a minor effect on geology and soil properties with land disturbances as the initial location and future locations are likely to be existing Opencut sites. The Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere, and conditions that would be placed in MAQP #5220-00.

D. Vegetation Cover, Quantity, and Quality

This permitting action would have minor impacts on the surrounding vegetation because the proposed equipment is planned to go into an existing pit. The existing surrounding land is currently rural and agricultural in nature. The emissions from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment. Overall, this project would have minor effects on the vegetation cover, quantity and quality.

E. Aesthetics

Providing a new permit at an existing pit and associated equipment will not result in any aesthetic changes as the pit already has other industrial equipment located at the site.

F. Air Quality

Emissions will be minimized by limitations and conditions that would be included in MAQP #5220-00. The permit would provide enforceable conditions specific to the age of the equipment and any applicable regulations. While deposition of pollutants would continue to occur, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #5220-00.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. The Natural Heritage Map Viewer search results identified a number of species of concern within the search radius. Animal species of concern include the Long-billed Curlew, McCown's Longspur, Green-tailed Towhee, Great Blue Heron, Clark's Nutcracker, Cassin's Finch, Astragalus convallarius and Wolverine. Because potential emission levels are minor, and disturbance is limited as the current operation is in an existing pit, the Department has determined that there will be a minor disturbance to unidentified unique, endangered, fragile, or limited environmental resources in the area.

H. Sage Grouse Executive Order

The Department recognizes that the site location is not within a Greater Sage Grouse Habitat Area as defined by Executive Order No. 12-2015.

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

The facility would have minor impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be minor. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the addition of the new equipment would be minor.

The facility would be expected to have minor impacts on the demand for the environmental resource of energy because of fuel usage would be required at the site due to the diesel-fired engine. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

J. Historical and Archaeological Sites

Since the site already exists and no new disturbance is planned, no review of any historical or archaeological sites was attempted.

K. Cumulative and Secondary Impacts

The facility would cause minor effects on the physical and biological aspects of the human environment because the facility and activities produce compounds NOx and fugitive dust from equipment and due to truck traffic. However, conditions have been placed in MAQP #5220-00 to ensure that only minor air quality impacts would occur. Limitations would be established in the permit to minimize air pollution. Overall, any impacts to the physical and biological environment would be minor.

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

A. Social Structures and Mores

The facility would not cause disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the initial pit location already exists, and the proposed equipment is similar to equipment currently operated at the site.

B. Cultural Uniqueness and Diversity

Only minor impacts to the cultural uniqueness and diversity of the area would be anticipated as the planned operating site is an existing pit. No additional employees are expected with the permit issuance. In addition, no new disturbance is planned. Therefore, the cultural uniqueness and diversity of the area would not likely be affected.

C. Local and State Tax Base and Tax Revenue

The facility would result in minor impacts to the local and state tax base and tax revenue as a result of the facility operation. However, the on-going operations would continue to have material hauling from the site. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

The land at the current location is currently used as an opencut pit. The facility would not have any known impact on agricultural production. However, because the facility currently exists, no impact to agricultural production or increase in industrial production would be expected.

E. Human Health

The completed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the facility would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor. The Department believes this washing facility will only have minor impacts.

F. Access to and Quality of Recreational and Wilderness Activities

The initial planned location is an existing pit and there would be no impacts to access and quality of recreational and wilderness activities in the project.

G. Quantity and Distribution of Employment

The facility would have minor impacts on the quantity and distribution of employment as the current equipment already operates in a pit and the new equipment would also operate in the same pit. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the facility.

H. Distribution of Population

Any impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the facility. Overall, any impacts to the distribution of population in the area would be minor.

I. Demands of Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #5220-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #5220-00. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on local industrial and commercial activity because the facility would represent only a minor increase in the industrial and commercial activity in the area.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #5220-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the facility is relatively small, any impacts from the facility would be minor.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this facility would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the proposed equipment, the industrial production, employment, and tax revenue (etc.) impacts resulting from the facility would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5220-00.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for issuing a permit for a wash plant. MAQP #5220-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there are no major or unknown effects associated with this proposal.

Individuals or groups contributing to this EA: Montana Department of Environmental Quality, Montana Natural Heritage Program

EA prepared by: Craig Henrikson
Date: December 18, 2018