December 5, 2017

Croell, Inc.
P.O. Box 470
Hardin, MT 59034

Dear Mr. Frisinger:

Montana Air Quality Permit #5169-02 is deemed final as of December 5, 2017, 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
Environmental Engineer
Air Quality Bureau
(406) 444-6711

JM:CH
Enclosure

Montana Department of Environmental Quality
Air, Energy and Mining Division

Montana Air Quality Permit #5169-02

Croell, Inc.
P.O. Box 470
Hardin, MT 59034

December 05, 2017

MONTANA AIR QUALITY PERMIT

Issued To: Croell, Inc.
PO Box 470
Hardin, MT 59034

MAQP: # 5169-02
Application Complete: 10/10/17
Preliminary Determination Issued: 10/17/17
Department's Decision Issued: 11/17/17
Permit Final: 12/05/17
AFS #: 777-5169

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

Croell operates a portable crusher, screen, wash plant, and concrete batch plant initially located in the Carl Moore Opencut Pit at 45.71518° latitude, -107.67831° longitude, Section 29, Township 1 South Range 33 East in Big Horn County, Montana. However, MAQP 5169-02 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (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.

B. Current Permit Action

On September 8, 2017, the Department received an application to modify MAQP#5169-01 from Croell. Croell proposed to add a screen plant with a capacity of 400 tons per hour to the permitted equipment under MAQP #5169-02.

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 six 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 17.8.752).

5. Croell 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. Croell 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).

7. Croell shall not operate more than 3 crushers at any given time and the total combined maximum rated design capacity of the crushers shall not exceed 900 tons per hour (TPH) (ARM 17.8.749).

8. Croell shall not operate more than 5 screens for processing dry material at any given time and the total combined maximum rated design capacity of the screens shall not exceed 800 TPH (ARM 17.8.749).

9. Croell shall not operate or have on-site more than two (2) diesel engine(s)/generator(s). The combined maximum capacity of the engines that drive the generators shall not exceed 700 horsepower (hp) (ARM 17.8.749).

10. Croell shall install, operate, and maintain a fabric filter dust collection system for the control of particulate matter emissions from the cement storage truss/bin (ARM 17.8.752).

11. Croell shall install, operate, and maintain a rubber boot load-out spout to control particulate emissions from the product load-out opening(s) on the portable concrete plant(s), where cementation and aggregate materials are transferred for mixing (ARM 17.8.752).

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

13. Croell 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).

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

B. Emissions Monitoring

Croell shall inspect the fabric filter dust collector and its vents for each concrete batch plant, which are used for controlling emissions from the silo, every 6 months of operation to ensure that each collector is operating at the optimum efficiency. Records of inspections, repairs and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).

C. 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. 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).

D. Operational Reporting Requirements

1. If this crushing/screening/concrete cement production 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. Croell 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. Croell 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 shall be maintained by Croell 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).

E. Notification

Croell shall provide the Department with written notification of the actual start-up date of the crushing, screening and washing, and concrete cement production facility postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – Croell 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 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 Croell fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Croell of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds 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 permitted source.

G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Croell 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. Croell 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
Croell, Inc.
MAQP #5169-02

I. Introduction/Process Description

Croell, Inc. (Croell) owns and operates a portable crushing, screening and washing plant with a combined maximum rated design capacity of 900 tons per hour (TPH) for crushing and 800 TPH for screening of dry material. The plant employs a diesel-fired generator set to provide power to equipment with a maximum design capacity of 600 horsepower (hp). There are also 2 concrete batch plants rated at 50 cubic yards per hour and a diesel-fired generator rated at 100 hp associated with this permit.

A. Permitted Equipment

The following list of permitted equipment is based on the information provided within the applications submitted by Croell and a provided for reference. MAQP #5169-02 is written de minimis friendly and operational flexibility is provided so that alternate equipment may be utilized as long as maximum capacities are not exceeded and permit conditions are met. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action consists of the following:

Crushing/Screening Operation

- SR4-3412 Generator Set: Caterpillar four stroke rich burn diesel-fired engine generator, 600 hp max capacity
- 1024 Pioneer Jaw Crusher, 300 tph max capacity
- 4026 Cedar Rapids Roller Crusher, 300 tph max capacity
- 1213 Cedar Rapids/El Jay Cone Crusher, 300 tph max capacity
- Eagle Sand Wash Plant, two deck screens and a sand screen, 600 tph max capacity
- Pioneer, Wet Deck, Screening Plant, 4' x 10' two deck screen, 400 tph max capacity
- Cedar Rapids, Wet Deck, Screening Plant, 7' x 20' three deck screen, 400 tph max capacity
- Associated material handling equipment

Concrete Batch Plant Operation

- Fastway Silo and Batcher, 50 cubic yards per hour
- Fastway Portable Batch and Silo, 50 cubic yards per hour
- Magnum 100 horsepower Generator
- Associated material handling equipment

B. Source Description

Croell's initial location, the Carl Moore Opencut Pit, is the operation home pit and is located at Section 29, Township 1 South, Range 33 East in Big Horn County (45.71518°, -107.67831°), Montana.

C. Permit History

On January 21, 2017, Croell, Inc. was issued **MAQP #5169-00** for the operation of a portable crushing, screening, and wash plant.

On April 5, 2017, the Department received from Croell, Inc. an application of modification of MAQP #5169-00. Croell proposed to add two (2) Fastway portable concrete cement batch plants with an individual maximum production capacity of 50 cubic yards per hour and a combined production rate of 100 cubic yards per hour, one (1) portable Magnum MM080 generator rated at 100 horsepower (hp), and associated material handling equipment. The current permit action updates the permitted equipment list as well as updates the emissions inventory. **MAQP #5169-01** replaced MAQP #5169-00.

D. Current Permit Action

On September 8, 2017, the Department received an application to modify MAQP#5169-01 from Croell. Croell proposed to add a screen plant with a capacity of 400 tons per hour to the permitted equipment under MAQP 5169-02. **MAQP #5169-02** replaces MAQP 5169-01

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

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

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   Croell 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
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

Croell 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, Croell shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

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

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

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

6. ARM 17.8.340 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) Croell 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 Croell, the portable crushing equipment to be used under MAQP #5169-02 is subject to this subpart because it meets the definition of affected facility and was constructed or modified 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. Based on the information submitted by Croell, the CI ICE equipment to be used under MAQP #5169-02 is not subject to this subpart because the CI ICE will be operated as a portable source.

However, a non-road engine would become regulated as a stationary engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. Therefore, this subpart would become applicable if Croell operated the CI ICE at a single location for more than 12 months or a shorter period of time for an engine located at a seasonal source.

7. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Croell is potentially a NESHAP-affected facility under 40 CFR Part 63 and could be subject to the requirements of the following subparts.

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

   b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Croell, the RICE equipment to be used under MAQP #5169-02 is not subject to this subpart because it will be operated as a portable source.

      However, a non-road engine would become regulated as a stationary engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. Therefore, this subpart would become applicable if Croell operated the RICE at a single location for more than 12 months or a shorter period of time for an engine located at a seasonal source.

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. Croell 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.

   Croell has a PTE greater than 15 tons per year of oxides of nitrogen (NO_X), particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM_{10}), 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. Croell 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. Croell submitted an affidavit of publication of public notice for the 9/7/2017 issue of the *Big Horn County News*, a newspaper of general circulation in the Town of Hardin in Big Horn 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 Croell of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an 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 Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

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

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

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

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

   c. PTE > 70 tons/year of 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 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 #5169-02 for Croell, the following conclusions were made:

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

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

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

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

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

f. This source is not a Title IV affected source

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

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

Based on these facts, the Department has determined that Croell 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, Croell will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for any new or modified source. Croell shall install on the new or modified source the maximum air pollution control capability that is technically practicable and economically feasible.

A BACT analysis accompanied the permit application submitted by Croell, MAQP #5169-02, addressing available methods of controlling emission from operation of crushing and screen operation. 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.

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.

A. Process and Fugitive Particulate Emissions

Two types of emission controls are readily available and used for dust suppression of fugitive emissions that result from the operation of crushing/screening equipment and associated activities. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation itself. However, in view of the fact that water is more readily available, more cost effective, is equally effective as chemical dust suppressant, while presenting less potential environmental quality degradation, water has been identified as the most appropriate method of pollution control of particulate emissions. In addition, water suppression has been required of recently permitted similar sources.

Croell shall meet the NSPS opacity limits established for crushers and screen in II.A.1 and II.A.2; for any equipment not subject to an NSPS shall meet limits in II.A.3.

Croell is required to have water spray bars and water available on site at all times and to apply water, as necessary, to maintain compliance with the opacity restrictions and reasonable precaution limitations.

The control options selected contained control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards. The Department determined that using water spray bars and water dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT.

IV. Emission Inventory

CONTROLLED	**tons/year**						
Emission Source	**PM**	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**CO**	**VOC**	**SO_2**
Cold Aggregate Storage Piles	17.00	8.04	1.22	--	--	--	--
Cold Aggregate Handling/Conveyors	1.47	0.48	0.14	--	--	--	--
Cold Aggregate Screens	13.49	4.54	0.31	--	--	--	--
900 TPH Crushing Circuit	4.73	2.13	0.39	--	--	--	--
Plant Load-Out	3.44	1.75	0.26	--	--	--	--
Haul Roads / Vehicle Traffic Crushing	5.68	1.57	0.16	--	--	--	--
Haul Roads / Vehicle Traffic Concrete	5.68	1.57	0.16	--	--	--	--
Fastway Concrete Batch Plant	37.08	12.96	1.94	--	--	--	--
Diesel Generator Sets	6.75	6.75	6.75	95.05	20.48	7.71	6.29
Total Emissions	**95.33**	**39.79**	**11.32**	**95.05**	**20.48**	**7.71**	**6.29**

NOTE: $PM_{2.5}$ emissions for concrete batch plants are assumed to be 15% of PM emissions, AP-42, Appendix B.2, Category 3, 9/90.

Crushing/Screening Emissions Calculations:

Cold Aggregate Storage Piles

Maximum Process Rate = 1,000 ton/hr (Maximum plant process rate)	1,000	**ton/hr**
Maximum Hours of Operation = 8,760 hrs/yr	8760	**hrs/yr**
Number of Piles = 1 piles	1	**piles**
PM Emissions:		
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.		
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00388 lb/ton	0.0039	**lb/ton**
Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)	0.74	
U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	9.3	**mph**
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	2.5	**%**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (1 piles) * (ton/2000 lb) * (0.00388216962566822 lb/ton) = 17.00 ton/yr	17.00	**ton/yr**

PM10 Emissions:		
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.		
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00184 lb/ton	0.00184	**lb/ton**
Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)	0.35	
U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	9.3	**mph**
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	2.5	**%**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (1 piles) * (ton/2000 lb) * (0.00183616130943767 lb/ton) = 8.04 ton/yr	8.04	**ton/yr**
PM2.5 Emissions:		
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.		
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00028 lb/ton	0.000278	**lb/ton**
Where: k = particle size multiplier = 0.053 (Value for PM < 2.5 microns per AP 42, Sec. 13.2.4.3, 11/06)	0.053	
U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	9.3	**mph**
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)	2.5	**%**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (1 piles) * (ton/2000 lb) * (0.000278047284000562 lb/ton) = 1.22 ton/yr	1.22	**ton/yr**

Conveyor Transfer Point (SCC 3-05-020-06)

Maximum Process Rate = 150 ton/hr (Maximum plant process rate)	150	**ton/hr**
Maximum Hours of Operation = 8,760 hrs/yr	8760	**hrs/yr**
Number of Transfers = 16 transfer (Company Information)	16	**transfer**
Total PM Emissions:		
Emission Factor = 0.00014 lb/ton (0.00014 controlled, AP 42, Table 11.19.2-2, 8/04)	0.00014	**lb/ton**
Calculation: (150 ton/hr) * (8760 hrs/yr) * (16 transfer) * (ton/2000 lb) * (0.00014 lb/ton) = 1.47 ton/yr	1.47	**ton/yr**
Total PM10 Emissions:		
Emission Factor = 0.000046 lb/ton (0.000046 controlled, AP 42, Table 11.19.2-2, 8/04)	0.000046	**lb/ton**
Calculation: (150 ton/hr) * (8760 hrs/yr) * (16 transfer) * (ton/2000 lb) * (0.00014 lb/ton) = 0.48 ton/yr	0.48	**ton/yr**
Total PM2.5 Emissions		
Emission Factor = 0.000013 lb/ton (0.000013 controlled, AP 42, Table 11.19.2-2, 8/04)	0.000013	**lb/ton**
Calculation: (150 ton/hr) * (8760 hrs/yr) * (16 transfer) * (ton/2000 lb) * (0.00014 lb/ton) = 0.14 ton/yr	0.14	**ton/yr**

Screening (SCC 3-05-020-02, 03)

Maximum Process Rate = 1,400 ton/hr (Maximum plant process rate, includes wash plant screening)	1,400	**ton/hr**
Maximum Hours of Operation = 8,760 hrs/yr	8760	**hrs/yr**
Number of Screens = 1 screen(s) (for calculation purposes, screening emissions are estimated as 1 screen at max combined plant capacity))	1	**screen(s)**
Total PM Emissions:		
Emission Factor = 0.0022 lb/ton (0.0022 controlled, AP 42, Table 11.19.2-2, 8/04)	0.0022	**lb/ton**
Calculation: (1,400 ton/hr) * (8760 hrs/yr) * (1 screen(s)) * (ton/2000 lb) * (0.0022 lb/ton) = 9.64 ton/yr	13.49	**ton/yr**
Total PM10 Emissions:		
Emission Factor = 0.00074 lb/ton (0.00074 controlled, AP 42, Table 11.19.2-2, 8/04)	0.00074	**lb/ton**
Calculation: (1,400 ton/hr) * (8760 hrs/yr) * (1 screen(s)) * (ton/2000 lb) * (0.0022 lb/ton) = 3.24 ton/yr	4.54	**ton/yr**
Total PM2.5 Emissions		
Emission Factor = 0.00005 lb/ton (0.000050 controlled, AP 42, Table 11.19.2-2, 8/04)	0.00005	**lb/ton**
Calculation: (1,400 ton/hr) * (8760 hrs/yr) * (1 screen(s)) * (ton/2000 lb) * (0.0022 lb/ton) = 0.22 ton/yr	0.31	**ton/yr**

Crushing Circuit (SCC 3-05-020-05)		
Maximum Process Rate = 900 ton/hr (Application information)	900	**ton/hr**
Maximum Hours of Operation = 8,760 hrs/yr	8760	**hrs/yr**
PM Emissions:		
Based on AP-42		
Emission Factor = 0.0012 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)	0.0012	**lb/ton**
Calculation: (900 ton/hr) * (8760 ton/hr) * (0.0012 lb/ton) * (ton/2000 lb) = 4.73 ton/yr	4.73	**ton/yr**
PM10 Emissions:		
Based on AP-42		
Emission Factor = 0.00054 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)	0.00054	**lb/ton**
Calculation: (0) * ( ) * (0.00054 lb/ton) * (ton/2000 lb) = 2.13 ton/yr	2.13	**ton/yr**
PM2.5 Emissions		
Emission Factor = 0.0001 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)	0.0001	**lb/ton**
Calculation: (900 ton/hr) * (8760 ton/hr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.39 ton/yr	0.39	**ton/yr**
Truck Unloading (SCC 3-05-020-31)		
Maximum Process Rate = 1,000 ton/hr (Maximum plant process rate)	1,000	**ton/hr**
Maximum Hours of Operation = 8,760 hrs/yr	8760	**hrs/yr**
Number of loads = 25 loads (Estimate)	25	**loads**
Total PM Emissions:		
Emission Factor = 0.0000314 lb/ton (PM=PM10 / 51%, AP-42, Appendix B.2, Table B.2.2, Category 3, 9/90)	0.0000314	**lb/ton**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (0.0000314 lb/ton) * (ton/2000 lb) * (25 loads) = 3.44 ton/yr	3.44	**ton/yr**
Total PM10 Emissions:		
Emission Factor = 0.000016 lb/ton (PM10=1.6E-05, AP 42, Table 11.19.2-2, 8/04)	0.000016	**lb/ton**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (0.000016 lb/ton) * (ton/2000 lb) * (25 loads) = 1.75 ton/yr	1.75	**ton/yr**
Total PM2.5 Emissions:		
Emission Factor = 0.0000024 lb/ton (PM2.5=1.6E-05 * 15%, AP-42, Appendix B.2, Table B.2.2, Category 3, 9/90)	0.0000024	**lb/ton**
Calculation: (1,000 ton/hr) * (8760 hrs/yr) * (0.0000024 lb/ton) * (ton/2000 lb) * (25 loads) = 0.26 ton/yr	0.26	**ton/yr**
Haul Roads		
Vehicle Miles Traveled (VMT) per Day = 5 VMT/day (Estimate)	5	VMT/day
VMT per hour = (5 VMT/day) * (day/24 hrs) = 0.21 VMT/hr	0.21	VMT/hr
Hours of Operation = 8,760 hrs/yr	8,760	hrs/yr

PM Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.		
Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT	12.46	lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	4.9	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.7	
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) = 11.37 tons/yr (Uncontrolled Emissions)	**11.37**	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-50/100) = 5.68 tons/yr (Apply 50% control efficiency)	**5.68**	tons/yr

PM10 Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.		
Emission Factor = k * (s / 12)^a * (W / 3)^b = 3.43 lb/VMT	3.43	lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	1.5	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) = 3.13 tons/yr (Uncontrolled Emissions)	**3.13**	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-50/100) = 1.57 tons/yr (Apply 50% control efficiency)	**1.57**	tons/yr

PM2.5 Emissions

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.		
Emission Factor = k * (s / 12)^a * (W / 3)^b = 0.34 lb/VMT	0.34	lb/VMT
Where: k = constant = 0.15 lbs/VMT (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.15	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons

Haul Roads

Vehicle Miles Traveled (VMT) per Day = 5 VMT/day (Estimate)	5	VMT/day
VMT per hour = (5 VMT/day) * (day/24 hrs) = 0.21 VMT/hr	0.21	VMT/hr
Hours of Operation = 8,760 hrs/yr	8,760	hrs/yr

PM Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT	12.46	lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	4.9	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.7	
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) = 11.37 tons/yr (Uncontrolled Emissions)	11.37	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-50/100) = 5.68 tons/yr (Apply 50% control efficiency)	5.68	tons/yr

PM10 Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = k * (s / 12)^a * (W / 3)^b = 3.43 lb/VMT	3.43	lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	1.5	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) = 3.13 tons/yr (Uncontrolled Emissions)	3.13	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-50/100) = 1.57 tons/yr (Apply 50% control efficiency)	1.57	tons/yr

PM2.5 Emissions

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = k * (s / 12)^a * (W / 3)^b = 0.34 lb/VMT	0.34	lb/VMT
Where: k = constant = 0.15 lbs/VMT (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.15	lbs/VMT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.9 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) = 0.31 tons/yr (Uncontrolled Emissions)	0.31	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.16 tons/yr (Apply 50% control efficiency)	0.16	tons/yr

Diesel Engine Generator

Note: Emissions are based on the power output of the engine (700 hp).		
Operational Capacity of Engine = 700 hp	700	hp
Hours of Operation = 8,760 hours	8,760	hours
PM Emissions:		
PM Emissions = 6.75 ton/yr (Assume all PM < 1.0 um)	**6.75**	ton/yr
PM-10 Emissions:		
Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	2.20E-03	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 6.75 ton/yr	**6.75**	ton/yr
PM2.5 Emissions		
Emission Factor = 0.0022 lbs/hp-hr (Assume all PM < 1.0 um)	2.20E-03	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 6.75 ton/yr (Assume all PM < 1.0 um)	**6.75**	ton/yr
NOx Emissions:		
Emission Factor = 0.031 lbs/hp-hr (AP-42, Sec. 3.4, Table 3.4-1, 10/96)	0.031	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 95.05 ton/yr	**95.05**	ton/yr
CO Emissions:		
Emission Factor = 0.00668 lbs/hp-hr (AP-42, Sec. 3.4, Table 3.4-1, 10/96)	6.68E-03	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 20.48 ton/yr	**20.48**	ton/yr
VOC Emissions:		
Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)	2.51E-03	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 7.71 ton/yr	**7.71**	ton/yr
SOx Emissions:		
Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	2.05E-03	lbs/hp-hr
Calculation: (8,760 hours) * (700 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 6.285 ton/yr	**6.29**	ton/yr

Concrete Production Emissions Calculations:

1. Aggregate Delivery to Ground Storage

Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hours	8,760	hours
PM Emissions:		
Emission Factor = 0.0064 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0064	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hours) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) = 2.80 tons	**2.80**	tons
Calculation: (8,760 hours) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) * (1-0/100) = 2.80 tons	**2.80**	tons
PM-10 Emissions:		
Emission Factor = 0.0033 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0033	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hours) * (100.00 yd3/hr) * (0.0033 lb/yd3) * (ton/2000 lb) = 0.00 tons	**0.00**	tons
Calculation: (8,760 hours) * (100.00 yd3/hr) * (0.0033 lb/yd3) * (ton/2000 lb) * (1-0/100) = 1.45 tons	**1.45**	tons

2. Sand Delivery to Ground Storage		
Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0015 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0015	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) = 0.66 tons	**0.66**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.66 tons	**0.66**	tons
PM-10 Emissions:		
Emission Factor = 0.0007 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0007	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) = 0.31 tons	**0.31**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.31 tons	**0.31**	tons
3. Aggregate Transfer to Conveyor		
Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0064 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0064	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) = 2.80 tons	**2.80**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) * (1-0/100) = 2.80 tons	**2.80**	tons
PM-10 Emissions:		
Emission Factor = 0.0031 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0031	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0031 lb/yd3) * (ton/2000 lb) = 1.36 tons	**1.36**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0031 lb/yd3) * (ton/2000 lb) * (1-0/100) = 1.36 tons	**1.36**	tons
4. Sand Transfer to Conveyor		
Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0015 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0015	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) = 0.66 tons	**0.66**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.66 tons	**0.66**	tons
PM-10 Emissions:		
Emission Factor = 0.0007 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0007	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) = 0.31 tons	**0.31**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.31 tons	**0.31**	tons
5. Aggregate Transfer to Storage Bins		
Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0064 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0064	lb/yd^3
PM Control Efficiency = 50% (water slurry)	50	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) = 2.80 tons	**2.80**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0064 lb/yd3) * (ton/2000 lb) * (1-50/100) = 1.40 tons	**1.40**	tons

PM-10 Emissions:

Emission Factor = 0.0031 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0031	lb/yd³
PM Control Efficiency = 50% (water slurry)	50	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0031 lb/yd3) * (ton/2000 lb) = 1.36 tons	**1.36**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0031 lb/yd3) * (ton/2000 lb) * (1-50/100) = 0.68 tons	**0.68**	tons

6. Sand Transfer to Storage Bins

Maximum Process Rate = 100.00 yd3/hr	100.00	yd³/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0015 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0015	lb/yd³
PM Control Efficiency = 50% (water slurry)	50	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) = 0.66 tons	**0.66**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0015 lb/yd3) * (ton/2000 lb) * (1-50/100) = 0.33 tons	**0.33**	tons

PM-10 Emissions:

Emission Factor = 0.0007 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0007	lb/yd³
PM Control Efficiency = 50% (water slurry)	50	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) = 0.31 tons	**0.31**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0007 lb/yd3) * (ton/2000 lb) * (1-50/100) = 0.15 tons	**0.15**	tons

7. Cement Delivery to Silo

Maximum Process Rate = 100.00 yd3/hr	100.00	yd³/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0002 lb/yd3 (controlled, AP-42, Table 11.12-2, 6/06)	0.0002	lb/yd³
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0002 lb/yd3) * (ton/2000 lb) = 0.09 tons	**0.09**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0002 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.09 tons	**0.09**	tons

PM-10 Emissions:

Emission Factor = 0.0001 lb/yd3 (controlled, AP-42, Table 11.12-2, 6/06)	0.0001	lb/yd³
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0001 lb/yd3) * (ton/2000 lb) = 0.04 tons	**0.04**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0001 lb/yd3) * (ton/2000 lb) * (1-0/100) = 0.04 tons	**0.04**	tons

8. Weigh Hopper Loading of Sand/Aggregate

Maximum Process Rate = 100.00 yd3/hr	100.00	yd³/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0079 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0079	lb/yd³
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0079 lb/yd3) * (ton/2000 lb) = 3.46 tons	**3.46**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0079 lb/yd3) * (ton/2000 lb) * (1-0/100) = 3.46 tons	**3.46**	tons

PM-10 Emissions:

Emission Factor = 0.0038 lb/yd3 (uncontrolled, AP-42, Table 11.12-2, 6/06)	0.0038	lb/yd³
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0038 lb/yd3) * (ton/2000 lb) = 1.66 tons	**1.66**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0038 lb/yd3) * (ton/2000 lb) * (1-0/100) = 1.66 tons	**1.66**	tons

9. Truck Mix Loading of Cement/Supplement/Sand/Aggregate		
Maximum Process Rate = 100.00 yd3/hr	100.00	yd^3/hr
Hours of Operation = 8,760 hr/yr	8,760	hr/yr
PM Emissions:		
Emission Factor = 0.0568 lb/yd3 (controlled, AP-42, Table 11.12-2, 6/06)	0.0568	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0568 lb/yd3) * (ton/2000 lb) = 24.88 tons	**24.88**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.0568 lb/yd3) * (ton/2000 lb) * (1-0/100) = 24.88 tons	**24.88**	tons
PM-10 Emissions:		
Emission Factor = 0.016 lb/yd3 (controlled, AP-42, Table 11.12-2, 6/06)	0.016	lb/yd^3
PM Control Efficiency = 0%	0	%
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.016 lb/yd3) * (ton/2000 lb) = 7.01 tons	**7.01**	tons
Calculation: (8,760 hr/yr) * (100.00 yd3/hr) * (0.016 lb/yd3) * (ton/2000 lb) * (1-0/100) = 7.01 tons	**7.01**	tons

V. Existing Air Quality

This permit is for a portable facility to be initially located in Section 29, Township 1 South, Range 33 East in Big Horn County, Montana. Big Horn County, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

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

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5169-02, the Department determined that the impact from this permitting action will be minor. Due to the portable nature and intermittent operation of the source, the Department did not require an ambient air impact analysis.

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)].

YES	NO	
		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.

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

ENVIRONMENTAL ASSESSMENT (EA)

Issued To*:* Croell, Inc.
Carl Moore Opencut Pit
PO Box 470
Hardin, MT 59034

Montana Air Quality Permit number (MAQP): **5169-02**

Draft EA Issued: **10/17/2017**
Final EA Issued: **11/17/2017**
Final Permit Issued **12/05/2017**

1. *Legal Description of Site*: The initial location of the proposed portable concrete batch plants would be located in Section 29, Township 1 South, Range 33 East in Big Horn County (45.71377° latitude, -106.67293° longitude), Montana. However, 5169-02 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. The current land use is used for crushing and screening and there would be no impacts to the property.

2. *Description of Project*: The Department received a permit application from Croell for the addition of another 400 tons/hour screening plant to the crusher, screen, wash and concrete plant. The project fulfills the area's need for concrete and gravel products as the surrounding area develops.

3. *Objectives of Project*: The project's objective would be to increase the production of the business and revenue for the company through the sale and use of concrete and gravel products. The issuance of MAQP #5169-02 would allow Croell to operate the newly permitted screening equipment at various locations throughout Montana including the proposed initial site location and home pit.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. If the project was not approved, the area may need to get the concrete and gravel products from another source potentially farther away. This would have adverse environmental, social and economic impacts. There would be more air pollution due to the transportation; there would be fewer jobs in the near-by area which would negatively impact the near-by community. Therefore, the "no-action" alternative was eliminated from further consideration. Other alternatives considered were discussed in the BACT analysis, Section III, in the permit.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5169-02.

As required under the Sage Grouse Executive Order, the proposed project information was submitted to, and reviewed by the Montana Sage Grouse Habitat Conservation Program. The results of the review were submitted to the Department with application materials for the proposed project. Reference Section 7.H for details.

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

This permitting action would be expected to have a minor effect on the terrestrial and aquatic life and habitats, as the proposed project is to add equipment to an existing operation. There would not be any new surface disturbance. The air emissions would be controlled through enforceable permit conditions, federal and state regulations.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression, concrete production, and surrounding facility area. The source has already obtained a Montana pollutant discharge elimination system (MPDES) permit. The water quality, quantity and distribution would be protected through that permitting agency.

C. Geology and Soil Quality, Stability and Moisture

Soil quality would be mitigated through the reasonable precautions rule; this rule requires the use of water to suppress dust and particulate matter from entering the atmosphere. This project would take place in an already existing opencut pit. The impacts would be mitigated through permit conditions and the land is already disturbed for the same type of operation.

D. Vegetation Cover, Quantity, and Quality

Impacts to vegetation cover, quantity and quality are expected to be minor because the source would be operating in an already developed open pit mine. The impacts would be mitigated through permit conditions.

E. Aesthetics

The land the proposed project would occupy is an existing opencut pit. The surrounding area is used for agriculture. The aesthetics would remain the same.

F. Air Quality

Air quality impact from the proposed project would be mitigated through the MAQP operating conditions and would protect the national ambient air quality standards as the project moves throughout the state. Some locations in the state require additional permitting as stated in the permit. MAQP #5169-02 includes conditions limiting the opacity at the facility and requires the use of a fabric filter baghouse to minimize particulate matter emissions.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify species of concern that may be found in the area where the initial proposed concrete and gravel products facility would occur. Search results have concluded there are 5 animal species of concern in the area. Area, in this case, would be defined by the township and range of the proposed site, with an additional one mile buffer. The known species of concern is the Great Blue Heron, Preble's Shrew, Merriam's Shrew, Plains Hog-nosed Snake, and the Western Milksnake. Effects of operating the proposed project in this area would be mitigated since the area is already disturbed and the project is small, temporary, and operates on an intermittent basis. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

H. Sage Grouse Executive Order

The Department recognizes that the site location is within Designated Sage Grouse General Habitat Area as defined by Executive Order No. 12-2015. As the application for this project was received after the Executive Order effective date of 1/1/2016, this project is subject to review under the Executive Order. As required under the Executive Order, the proposed project was reviewed by the Montana Sage Grouse Habitat Conservation Program (program) and that information was submitted by the applicant with their application materials. Recommendations by the program are as follows:

Reclamation should re-establish native grasses, forbs and shrubs to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage grouse and replace or enhance sage grouse habitat.

Weed management is required within General Habitat for sage grouse. Reclamation of disturbed areas must include control of noxious weeds and invasive plant species, including cheatgrass and Japanese brome.

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

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Some water use is required for dust suppression of particulate emission being generated by the new aggregate screen. In addition, air resources would be protected through MAQP operating conditions. The source would be supplying its own energy onsite with a diesel generator.

J. Historical and Archaeological Sites

The Department contacted the Montana History Society State Historical Prevention Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction and operation. There is one site of historical or archaeological significance present: a historical railroad. No structures would be expected to be removed or altered as a result of the issuance of MAQP #5169-02; therefore, no impacts to known historically significant sites would be expected. It should be noted that the State Historical Preservation Office maintains the position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, they would recommend that they be recorded and a determination of their eligibility be made. As long as there would be no disturbance or alteration to structures over fifty years of age, SHPO states there is a low likelihood cultural properties would impacted.

K. Cumulative and Secondary Impacts

The operation of the proposed project would likely contribute to cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would increase the production of concrete from gravel and rock processed from an already existing and permitted facility, use water from the local aquifer and generate noise and air emissions. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlines in MAQP#5169-02 as well as other permits issued.

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

A. Social Structures and Mores

The operation of the proposed project would not be expected to cause any disruption to the social structures and mores in the area because the source would be a minor industrial source.

B. Cultural Uniqueness and Diversity

The impact to cultural uniqueness and diversity of these areas would be minor from the proposed equipment because the site would be located in an area that is an existing industrial site now owned by Croell. The existing land use will continue under new ownership. There is no effect on the cultural uniqueness and diversity.

C. Local and State Tax Base and Tax Revenue

The proposed project would have little, if any impact on the local and state tax base and tax revenue. The facility would be a minor industrial source of emissions and would have seasonal intermittent operations. Thus, only minor impacts to the local and state tax base and revenue would be expected from the employees and facility production. The impacts to local tax base and revenue would be expected to be minor as the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The proposed project would be located in an already existing operation and opencut pit. All agricultural or industrial production is expected to stay the same.

E. Human Health

MAQP #5169-02 incorporates conditions to ensure compliance with all applicable air quality rules and standards. The rules and standards are designed to protect human health. The proposed project is operating in an already existing opencut pit where the previous owner also operated a crushing and screening facility. There are no impacts to human health because of this permitting action.

F. Access to and Quality of Recreational and Wilderness Activities

Based on the information received from Croell, no recreational activities or wilderness areas are near the proposed project site. No access to the public is available on the land privately owned by Croell where the proposed project would be located. No impacts to the access to and quality of the recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The operation would not increase employment at the location. However, if Croell is awarded contracts, the number of employees may increase.

H. Distribution of Population

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

I. Demands for Government Services

Minor increases would be seen in traffic on existing roadways in the area while the facility operates. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be expected to increase.

J. Industrial and Commercial Activity

The operation of the portable concrete facility would increase the industrial activity in the proposed area of operation. However, due to the relatively small increase in size of the concrete facility by industrial standards, any increase in industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

Croell would be operating in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #5169-02 contains operational restrictions to maintain compliance with any applicable ambient air quality standards. This permitting action would comply with state and local regulations in regards to environmental plans and goals.

L. Cumulative and Secondary Impacts

The operations of the proposed project would impact the economy of the surrounding area by providing construction materials to the nearby area. Socially this project would not have cumulative or secondary impacts to the nearby communities.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the operation of a portable concrete cement operation. MAQP #5169-02 includes 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 – Montana Sage Grouse Conservation Program

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

EA prepared by: Loni Patterson
Date: September 28, 2017