

April 13, 2015

John Scepaniak Wm. D. Scepaniak, Inc. P.O. Box 299 Holdingford, MN 56340

Dear Mr. Scepaniak:

Montana Air Quality Permit #5118-00 is deemed final as of April 11, 2015, by the Department of Environmental Quality (Department). This permit is for a portable crushing and screening operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel Air Permitting Supervisor

Julio A Merkl

Air Quality Bureau (406) 444-3626

Shawn Juers

Show Co

Environmental Engineer

Air Quality Bureau (406) 444-2049

JM:SJ Enclosure

## Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #5118-00

John Scepaniak Wm. D. Scepaniak, Inc. P.O. Box 299 Holdingford, MN 56340

April 11, 2015



## MONTANA AIR QUALITY PERMIT

Issued To: Wm. D. Scepaniak, Inc. P.O. Box 299 Holdingford, MN 56340 MAQP: #5118-00 Application Complete: 2/23/2015

Preliminary Determination Issued: 3/10/2015 Department's Decision Issued: 3/26/2015

Permit Final: 4/11/2015

AFS #: 777-5118

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

MAQP #5118-00 is intended to provide for flexibility in exact make and model of equipment, provided maximum capacities and equipment counts do not exceed the equipment list permitted. Further, MAQP #5118-00 is intended to allow the permittee to swap out equipment, provided de minimis notification is made and maximum capacities and equipment counts do not exceed the equipment list permitted. Scepaniak Inc. proposes to operate a portable crushing and screening operation consisting of the following equipment:

- Maximum rated total crushing capacity of 600 tons per hour
- Maximum rated total screening capacity of 1,200 tons per hour
- One (1) generator engine with a maximum horsepower rating of 830 horsepower
- Up to fifteen (15) transfer conveyors

#### B. Plant Location

Scepaniak Inc. operates a portable crushing and screening operation, which is expected to be initially located in the South ½ of the Northwest ¼ of Section 1, Township 23 North, Range 59 East, in Richland County, Montana. However, MAQP #5118-00 applies while operating at any location in Montana, except those areas having a Montana 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<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum requiring additional and/or more stringent conditions would be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.

#### SECTION II: Conditions and Limitations

#### A. Emission Limitations

- 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 17.8.749 and ARM 17.8.752).
- 5. Scepaniak Inc. 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).
- Scepaniak Inc. 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. Scepaniak Inc. shall not operate more than 600 tons per hour (TPH) of total maximum rated crushing capacity (ARM 17.8.749).
- 8. Scepaniak Inc. shall not operate more than 1,200 TPH of total maximum rated screening capacity (ARM 17.8.749).
- 9. Scepaniak Inc. shall not operate or have on-site more than one diesel generator engine. The maximum rated capacity of the engine that drives the generator shall not exceed 830 horsepower, and shall be certified to meet EPA Tier II emissions standards or better (ARM 17.8.749).

- 10. Operation of the diesel engine driving the generator shall not exceed 5,500 hours per rolling 12 months as determined monthly on a rolling 12-month time period (ARM 17.8.749).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Scepaniak Inc., at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 12. Scepaniak Inc. shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 13. Scepaniak Inc. shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

## B. Testing Requirements

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

## C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. Scepaniak Inc. 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. Scepaniak Inc. 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. Scepaniak Inc. shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Scepaniak Inc. as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 5. Scepaniak Inc. shall document, by month, the hours of operation of the diesel generator engine. By the 25th day of each month, Scepaniak Inc. shall total the hours of operation for the diesel generator engine for the previous month, and calculate and record the 12 month rolling sum. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

#### D. Notification

Scepaniak Inc. shall provide the Department with written notification of the actual start-up date of the Scepaniak Inc. facility postmarked within 15 days after the actual start-up date (ARM 17.8.749).

#### **SECTION III: General Conditions**

- A. Inspection Scepaniak Inc. shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Scepaniak Inc. fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Scepaniak Inc. 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 Scepaniak Inc. 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. Scepaniak Inc. 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 Wm. D. Scepaniak, Inc. MAQP #5118-00

## I. Introduction/Process Description

Wm. D. Scepaniak, Inc. (Scepaniak Inc.) owns and operates a portable crushing and screening operation.

## A. Permitted Equipment

MAQP #5118-00 is intended to provide for flexibility in exact make and model of equipment, provided maximum capacities and equipment counts do not exceed the equipment list permitted. Further, MAQP #5118-00 is intended to allow the permittee to swap out equipment, provided de minimis notification is made and maximum capacities and equipment counts do not exceed the equipment list permitted. Scepaniak Inc. proposes to operate a portable crushing and screening operation consisting of the following equipment:

- Maximum rated total crushing capacity of 600 tons per hour
- Maximum rated total screening capacity of 1,200 tons per hour
- One (1) generator engine with a maximum horsepower rating of 830 horsepower
- Up to fifteen (15) transfer conveyors

#### B. Source Description

The portable crushing and screening operation described above will likely either move often, or go to a 'home pit' location outside of the state. However, Scepaniak Inc. has designated the initial permitted location as the home pit location should it be decided to utilize an in state home location. The initial location is expected to be in the South ½ of the Northwest ¼ of Section 1, Township 23 North, Range 59 East, in Richland County, Montana.

#### 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. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).

Scepaniak Inc. 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. <u>ARM 17.8.110 Malfunctions</u>. (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.
- 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<sub>10</sub>
  - 11. ARM 17.8.230 Fluoride in Forage

Scepaniak Inc. 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, Scepaniak Inc. 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. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. 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). Scepaniak Inc. is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
  - a. <u>40 CFR 60, Subpart A General Provisions</u> 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 Scepaniak Inc., the portable crushing and screening operation to be used under MAQP #5118-00 is subject to this subpart.
  - 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. If the engine associated with the generator for this
    facility is deemed a stationary engine at any point in time, this standard would
    apply.

- 7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Scepaniak Inc. is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
  - a. <u>40 CFR 63, Subpart A General Provisions apply</u> to all equipment or facilities subject to a 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. If the generator engine utilized by Scepaniak Inc. is determined a stationary engine at any point in time, this Subpart would apply.
- 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. Scepaniak Inc. submitted the appropriate permit application fee for the current permit action.
  - 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. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. 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. Scepaniak Inc. has a PTE, determined prior to additional permit conditions, greater than 15 tons per year of PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO and VOC; 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. Scepaniak Inc. 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. Scepaniak Inc. submitted an affidavit of publication of public notice for the February 15, 2015 and February 18, 2015 issue of the Sidney Herald, a newspaper of general circulation in the Town of Sidney in Richland 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <u>ARM 17.8.755 Inspection of Permit</u>. 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 Scepaniak Inc. 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.801 Definitions</u>. 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.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (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<sub>10</sub>) in a serious PM<sub>10</sub> 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 #5118-00 for Scepaniak Inc., 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<sub>10</sub> nonattainment area.
    - d. This facility is subject to current NSPS (NSPS OOO and potentially NSPS IIII).
    - e. This facility is potentially subject to current NESHAP standards (Potentially 40 CFR 63 Subpart ZZZZ).
    - f. This source is not a Title IV affected source
    - g. This source is not a solid waste combustion unit.
    - h. This source is not an EPA designated Title V source.

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

#### III. BACT Determination

Pursuant to ARM 17.8.752, the owner or operator of a new or modified facility or emitting unit for which a MAQP is required shall install on the new or modified facility or emitting unit the maximum air pollution control capability that is technically practicable and economically feasible. Pursuant to ARM 17.8.740(2), in no case may application of BACT

result in emissions of any regulated air pollutant that would exceed the emissions allowable by any applicable standard under ARM Title 17, Chapter 8, Subchapter 3. Particulate Matter emissions are created by crushing, screening, and conveying equipment. The potential uncontrolled emissions of particulate matter emissions from these operations are significant. The moisture content of the material processed can have a substantial effect on emissions. Surface wetness causes fine particles to agglomerate on or to adhere to the faces of larger stones, with a resulting dust suppression effect. However, as new fine particles are created by crushing and attrition and as the moisture content is reduced by evaporation, this suppressive effect diminishes. Plants that use wet suppression systems (spray nozzles) to maintain material moisture as needed throughout the process can effectively control Particulate Matter emissions throughout the process.

Pursuant to ARM 17.8.740(2), if the department determines that technological or economic limitations on the application of measurement methodology to a particular class of emitting units would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice, or operational standard or combination thereof, to require the application of BACT. Such standard must, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and must provide for compliance by means that achieve equivalent results.

No measurement methodology exists to directly measure particulate emissions coming from crushing and screening operations which do not utilize a capture and control system. In accord with ARM 17.8.740(2), a visible emissions standard (opacity) may serve as a surrogate in defining the maximum degree of reduction required by BACT. Further, NSPS OOO, requiring that crushing and screening operations meet certain Opacity standards, is applicable to this operation, and incorporated by reference in ARM 17.8 Subchapter 3. Therefore, these standards serve as the floor for determining the maximum degree of reduction achievable, while meeting BACT.

The Department has determined that the limitations of NSPS OOO meets BACT for this source. Scepaniak, Inc. shall install and utilize water spray bars throughout the process, using spraybar design and placement and water in amounts as necessary, to meet the opacity limitations of NSPS OOO.

#### Fugitive Emissions

Particulate Matter can occur from haul roads, access roads, parking lots, material storage and handling, and the general plant area. Scepaniak, Inc. is subject to the general opacity requirements of Subchapter 3. These requirements limit opacity to no more than 20%, average over six consecutive minutes. The Department has determined that utilization of water or chemical dust suppressant, used as necessary to meet this limit, constitutes BACT for this source.

#### Diesel Generator Engine

Any new diesel-fired engine would likely be required to comply with federal engine emission limitations including, for example, EPA Tiered emission standards for non-road engines (40 CFR Part 89 or 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). The Department has determined that compliance with any

applicable federal emissions limits and standards, with no additional requirements, constitutes BACT for these engines. Application of any add on controls outside of the requirements of these rules would not be economical.

## IV. Emission Inventory\*\*

	Potential to Emit in Tons Per Year							
Emissions Source	PM	$PM_{10}$	$PM_{2.5}$	$NO_X$	CO	VOC	$SO_X$	
Crusher	7.88	3.15	0.18					
Screening	18.92	11.56	7.09					
Conveyor Transfer Points	5.52	1.81	0.51					
Piles	20.28	9.59	1.45					
Loading	0.80	0.26	0.07					
Unloading	0.12	0.04	0.00					
Haul Roads and Unpaved Areas	4.85	1.29	0.13					
Diesel Generator Engine	2.02	2.02	2.02	39.37a	15.25	39.37	4.68	
TOTAL	60.32	29.74	11.47b	39.37	15.25	39.37	4.68	

#### Footnotes:

- a. Inventory reflects enforceable limits on hours of operation of the portable diesel fired generator engine to keep emissions at or below the attainment area modeling threshold of 40 tons per year
- b. Based on the equipment list and capacities permitted, no hours of operation limitations were necessary to remain below the 12 tpy PM<sub>2.5</sub> modeling threshold.

\*\* CO = carbon monoxide

hp = horsepower

lb = pound

NO<sub>X</sub> = 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

## Crushing http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf

Maximum Throughput: 600 ton/hr (maximum rated throughput for any configuration)

Hours of Operation: 8760 hr/yr

#### **PM** Emissions

Emissions Factor: 0.003 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.003lb/ton\*600ton/hr= 1.8 lb/hr

1.8 lb/hr\*8760 hr/yr\*0.0005 ton/lb = 7.88 ton/yr

#### PM<sub>10</sub> Emissions

Emissions Factor: 0.0012 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations 0.0012lb/ton\*600ton/hr= 0.72 lb/hr 0.72lb/hr\*8760hr/yr\*0.0005 ton/lb = **3.15 ton/yr** 

PM<sub>2.5</sub> Emissions

Emissions Factor: 0.00007 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.00007 lb/ton\*600ton/hr= 0.042 lb/hr

0.042lb/hr\*8760hr/yr\*0.0005 ton/lb = **0.18** ton/yr

Screening <a href="http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf">http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</a>

Maximum Throughput: 600 ton/hr (maximum rated throughput for any configuration)

Hours of Operation: 8760 hr/yr

**PM** Emissions

Emissions Factor: 0.0036 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.0036 lb/ton\*600 ton/hr = 2.16 lb/hr

2.16 lb/hr\*8760 hr/yr\*0.0005 ton/lb = 9.46 ton/yr

PM<sub>10</sub> Emissions

Emissions Factor: 0.0022 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.0022lb/ton\*600ton/hr= 1.32 lb/hr

1.32 lb/hr\*8760 hr/yr\*0.0005 ton/lb = 5.78 ton/yr

PM<sub>2.5</sub> Emissions

Emissions Factor: 0.00135 lb/ton (See table - AP-42 indicates logarithmic charts are linear)

Calculations: 0.00134977443912449lb/ton\*600ton/hr= 0.80986466 lb/hr

0.80986 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 3.55 ton/yr

Conveyor Transfers <a href="http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf">http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</a>

Maximum Throughput: 600 ton/hr
Hours of Operation: 8760 hr/yr
Number of Conveyors: 15 conveyors

**PM** Emissions

Emissions Factor: 0.00014 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.00014 lb/ton \* 600 ton/hr \* 15 conveyors = 1.26 lb/hr

1.26 lb/hr\*8760 hr/yr\*0.0005 ton/lb = 5.52 ton/yr

PM<sub>10</sub> Emissions

Emissions Factor: 0.000046 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.000046lb/ton \* 600ton/hr \* 15conveyors= 0.414 lb/hr

0.414lb/hr \* 8760hr/yr \* 0.0005 ton/lb = 1.81 ton/yr

PM<sub>2.5</sub> Emissions

Emissions Factor: 0.000013 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)

Calculations: 0.000013lb/ton\*600ton/hr\*15conveyors= 0.117 lb/hr

0.117lb/hr\*8760hr/yr\*0.0005 ton/lb = 0.51 ton/yr

Piles <a href="http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0204.pdf">http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0204.pdf</a>

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

where:

E = emission factor

k = particle size multiplier (dimensionless)

U = mean wind speed, meters per second (m/s) (miles per hour [mph])

M = material moisture content (%)

K = 0.74 for PM

0.35 for  $PM_{10}$ 

0.053 for PM<sub>2.5</sub>

U = 9.1 www.ncdc.noaa.gov/oa/climate/online/ccd/avgwind.html

(Wind data for Montana)

M = 1.5 % - based on moisture contents assumed

for crushing and screening operations.

**PM** Emissions

Emissions Factor: 0.007716 lb/ton

Calculations: 0.0077lb/ton\*600ton/hr= 4.63 lb/hr

4.6296lb/hr\*8760hr/yr\*0.0005 ton/lb = **20.28** ton/yr

PM<sub>10</sub> Emissions

Emissions Factor: 0.003649 lb/ton

Calculations: 0.0036lb/ton\*600ton/hr= 2.19 lb/hr

2.1897lb/hr\*8760hr/yr\*0.0005 ton/lb = 9.59 ton/yr

PM<sub>2.5</sub> Emissions

Emissions Factor: 0.000553 lb/ton

Calculations: 0.0006 lb/ton\*600 ton/hr = 0.33 lb/hr

0.3316lb/hr\*8760hr/yr\*0.0005 ton/lb = 1.45 ton/yr

<u>Loading</u> <u>http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</u>

Maximum Capacity: 600 ton/hr Hours per year: 8760 hr/yr

PM<sub>10</sub> Emissions

Emissions Factor: 0.0001 lb/ton

Calculations: 0.0001lb/ton\*600ton/hr= 0.06 lb/hr

0.06 lb/hr\*8760 hr/yr\*0.0005 ton/lb = 0.26 ton/yr

<u>Unloading</u> <a href="http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf">http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</a>

PM<sub>10</sub> Emissions

Emissions Factor: 0.000016 lb/ton

Calculations: 0.000016lb/ton\*600ton/hr= 0.0096 lb/ton

0.0096lb/ton\*8760hr/yr\*0.0005 ton/lb = **0.04** ton/yr

\*\*This is unloading of fragmented stone for processing, for example

# <u>Haul Roads, Unpaved Area Traffic, Pile Area Traffic</u>

http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0 202.pdf

# $E = k (s/12)^a (W/3)^b$

#### **PM** Emissions

k =	4.9
a =	0.7
b =	0.45

10.635

E = 63 lb/mile

#### Calculations

10.64 lb/mile\*5miles traveled per day= 53.17813 lb/day 53.18 lb/day\*365 day/yr \* 0.0005 ton/lb = 9.71 ton/yr 50% control efficiency 4.85 applied: ton/yr

#### PM<sub>10</sub> Emissions

k =	1.5
a =	0.9
b =	0.45

2.8296

E = 02 lb/mile

#### Calculations

2.83 lb/mile\*5miles traveled per day= 14.14801 lb/day

14.15 lb/day\*365 day/yr \* 0.0005 ton/lb \* 50%

control = 1.29 ton/yr

PM <sub>2.5</sub> Emissions						
	0.45					
k =	0.15					
a =	0.9					
b =	0.45					
$_{\mathrm{S}} =$	5.95	< average of sand and gravel				
W =	50	tons (Department history)				
VMT =	5	miles traveled per day				
E =	0.28296	lb/mile				
Calculations						
0.2829 lb/mile*5miles traveled	l per day=	1.414801	lb/day			
1.41 lb/day*365 day/yr * 0.000	05 ton/lb * 50	0.13	ton/yr			

## **Diesel Generator Engine**

830 Horsepower Tier II Generator Engine

Engine Rating: 619 kW 830 hp
Hours of Operation: 5500 hr/yr

NO<sub>x</sub> Emissions

**Emissions Factor** 

Calculations

Calculations 10.5g/kW\*hr\*619kW\*5500hr/yr= 35747250.00 g/yr 35747250g/yr\*1/454 gm/lb =78738.44 lb/yr 78738.44 lb/yr / 2000 lb/ton =39.37 ton/yr **VOC Emissions Emissions Factor** 10.5 g/kW\*hr (Tier II Engine) Calculations 10.5g/kW\*hr\*619kW\*5500hr/yr= 35747250.00 g/yr 35747250g/yr\*1/454 gm/lb =78738.44 lb/yr 78738.44 lb/yr/ 2000 lb/ton =39.37 ton/yr PM Emissions **Emissions Factor** 0.54 g/kW\*hr (Tier II Engine)

0.54g/kW\*hr\*619kW\*5500hr/yr=

1838430g/yr\*1/454 gm/lb =

4049.41 lb/yr/ 2000 lb/ton =

1838430.00 g/yr

4049.41 lb/yr

2.02 ton/yr

10.5 g/kW\*hr (Tier II Engine)

#### SO<sub>2</sub> Emissions

Emissions Factor 0.00205 lb/hr-hr (AP-42)

Calculations 0.00205lb/hr-hr\*830hp= 1.7015 lb/hr

1.70 lb/hr\*5500hr/yr\*0.0005 ton/lb = 4.68 ton/yr

**CO** Emissions

Emissions Factor 0.00668 lb/hp-hr (AP-42)

Calculations 0.00668lb/hp-hr\*830hp= 5.5444 lb/hr

 $5.54 \text{ lb/hr} \times 5500 \text{hr/yr} \times 0.0005 \text{ ton/lb} = 15.25 \text{ ton/yr}$ 

## V. Existing Air Quality

This permit is for a portable facility to be located in Richland County, and other locations which are deemed attainment/unclassifiable for particulate ambient air quality standards.

## VI. Air Quality Impacts

This permit contains conditions and limitations derived from rules and programs designed to protect air quality for the site and surrounding area. Based on the limitations and conditions in the permit and the resulting allowable emissions, any impacts to air quality would be expected to be minor.

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

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

## IX. Environmental Assessment

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

#### **DEPARTMENT OF ENVIRONMENTAL QUALITY**

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

## FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Wm. D. Scepaniak, Inc.

Montana Air Quality Permit number (MAQP): 5118-00

Preliminary Determination Issued: 3/10/2015 Department Decision Issued: 3/26/2015

Permit Final: 4/11/2015

- 1. Legal Description of Site: The initial location of this portable operation is the South ½ of the Northwest ¼ of Section 1, Township 23 North, Range 59 East, in Richland County, Montana.
- 2. Description of Project: MAQP #5118-00 would permit the installation and operation of a portable crushing and screening plant.
- 3. *Objectives of Project*: To produce crushed and sized aggregate for various uses throughout the state, including construction of infrastructure in eastern Montana.
- 4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Wm. D. Scepaniak, Inc. has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5118-00.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			XX			Yes
В	Water Quality, Quantity, and Distribution			XX			Yes
С	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
Е	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
Н	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
Ι	Historical and Archaeological Sites			XX	_		Yes
J	Cumulative and Secondary Impacts			XX			Yes

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

#### A. Terrestrial and Aquatic Life and Habitats

Typically, portable crushing and screening operations locate within permitted open cut pits, often already existing. The proposed initial location of this portable equipment does not appear to have an existing and operating open cut pit, however, the MAQP does not provide permitting authority for operations requiring open cut permits.

Terrestrials may be present in the initial location, or any location, which this plant would operate. Conditions and limitations placed in MAQP #5118-00 would be derived from rules and programs designed to protect ambient air quality. These conditions and limitations would limit the allowable emissions of particulate matter, greatly reducing impacts to ambient air quality compared to uncontrolled operations.

Minor impacts to terrestrial and aquatic life and habitats as a result of issuance of MAQP #5118-00 would be expected.

## B. Water Quality, Quantity and Distribution

MAQP #5118-00 would require the use of water to minimize particulate emissions. Therefore, water usage would be expected. In addition, the facility would emit air pollutants; however, MAQP #5118-00 would contain limitations and conditions greatly reducing the potential of deposition of pollutants outside the operating area. The Department would expect minor impacts to water quality, quantity, and distribution as a result of issuance of MAQP #5118-00.

## C. Geology and Soil Quality, Stability and Moisture

Typically, portable crushing and screening operations locate within permitted open cut pits, often already existing. In this case, review of the proposed initial location does not appear to have an existing open cut operation, however, Montana open cut rules requires permitting for operations which remove more than 10,000 cubic yards of materials and overburden.

As discussed above, water would be used to minimize particulate emissions; however, the impacts of this water usage would be expected to be minor.

In regards to geology and soil quality, stability, and moisture, minor impacts would be expected as a result of issuance of MAQP #5118-00.

### D. Vegetation Cover, Quantity, and Quality

Typically, portable crushing and screening operations locate within permitted open cut pits, often already existing. In this case, review of the proposed initial location does not appear to have an existing open cut operation.

Although impacts may be determined to vegetation cover, quantity, and quality from sand and gravel operations in new locations, Montana open cut rules require permitting for operations which remove more than 10,000 cubic yards of materials and overburden, and issuance of such permit would require MEPA review. Therefore, the Department would expect no more than minor impacts to vegetation cover, quantity, and quality as a result of issuance of the MAQP #5118-00.

#### E. Aesthetics

The portable crushing and screening operation would include equipment which would have potential to produce significant visible emissions. MAQP #5118-00 would contain limitations and conditions which would greatly reduce potential visible emissions. MAQP #5118-00 would permit operations of a portable diesel fired generator engine, which would produce noise, however, noise levels would be expected to quickly diminish and likely present no more than a minor impact to aesthetics. MAQP #5118-00 does not provide open cut permit authority, which would be required for removal of more than 10,000 cubic yards of materials and overburden.

The Department would expect no more than minor impacts to aesthetics as a result of issuance of MAQP #5118-00.

## F. Air Quality

MAQP #5118-00 would contain limitations and conditions derived from rules designed to protect ambient air quality. The plant would be required to be operated such that particulate emissions are controlled, and operations of the diesel generator engine limited to limit impact to ambient air quality from associated emissions. Minor impacts to air quality would be expected as a result of issuance of MAQP #5118-00.

### G. Unique Endangered, Fragile, or Limited Environmental Resources

The initial location proposed is private agricultural land, with significant human disturbance occurring in the particular area as evidenced by presence of roads and structures, railroad, and agriculture practices.

The Whooping Crane is believed to be a species of special concern potentially in the general area, although review of NRIS records indicates there are no recent reported observations within the project location. The Whooping Crane is not known to breed in the state, and there have been no observations of nesting for Montana. In consideration of the location of the initial location for MAQP #5118-00 and the limited area of impact expected, no more than a minor impact to the Whooping Crane would be expected as a result of this permitting action.

The Least Tern is a species of special concern believed to be in the general area. Least Terns nest on unvegetated sand-pebble beaches and islands of large reservoirs and rivers in northeastern and southeastern Montana and usually avoid areas where relatively thick vegetation provides cover for potential predators. Generally, the Least Tern consumes small fishes (generally less than 9 cm long), but sometimes eats crustaceans or insects. Prey is obtained by diving from the air into shallow water. Because the project location is not expected to disturb areas the Least Tern prefers, and because emissions would be limited by issuance of MAQP #5118-00, impacts to the Least Tern would be expected to be minor.

Several species of fish of special concern are believed to potentially be present in the Yellowstone River. However, the distance of this river from the project location would indicate the impacts, if any, would be expected to be minor. Further, operations which remove more than 10,000 cubic yards of materials and overburden would require open cut permitting.

MAQP #5118-00 would limit potential pollutant emissions and deposition which could occur from the operations of a portable crushing and screening plant. Further, operations would be expected to be intermittent and seasonal. No more than minor impacts to unique endangered, fragile, or limited environmental resources would be expected, if any discernable impacts at all.

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

As discussed in sections 7.B and 7.F above, impacts to water and air would be expected to be minor. Although the generator engine associated with this operation would require use of diesel fuel, the energy requirements would be very small on an industrial scale. Demands on environmental resources of water, air, and energy would be expected to be minor.

## I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the location of the facility. No archaeological sites are known to be present. Because no structures would be expected to be removed or altered as a result of issuance of MAQP #5118-00, no impacts to known historically significant sites would be expected. Any impacts to historical and archaeological impacts would be expected to be minor.

## J. Cumulative and Secondary Impacts

The Department found no more than minor impacts to the individual physical and biological considerations above. From a cumulative and secondary impacts standpoint, no more than minor impacts would be expected.

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

	environment. The no-action disernative was discussed previously.							
		Major	Moderate	Minor	None	Unknown	Comments Included	
А	Social Structures and Mores			XX			Yes	
В	Cultural Uniqueness and Diversity			XX			Yes	
С	Local and State Tax Base and Tax Revenue			XX			Yes	
D	Agricultural or Industrial Production			XX			Yes	
Е	Human Health			XX			Yes	
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes	
G	Quantity and Distribution of Employment			XX			Yes	
Н	Distribution of Population			XX			Yes	
Ι	Demands for Government Services			XX			Yes	
J	Industrial and Commercial Activity			XX			Yes	
K	Locally Adopted Environmental Plans and Goals			XX			Yes	
L	Cumulative and Secondary Impacts			XX			Yes	

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

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

The issuance of MAQP #5118-00 would be expected to result in the addition of 8 new full time employees. A small area of land would experience a potential change in use from

agricultural to light industrial operations. However, an existing and operating rail yard is also located nearby. Minor impacts to social structures and mores and cultural uniqueness and diversity might be expected as a result of issuance of MAQP #5118-00.

#### C. Local and State Tax Base and Tax Revenue

The issuance of MAQP #5118-00 would be expected to result in the addition of 8 new full time employees, and would permit installation and operation of a portable crushing and screening plant. Minor impacts to local and state tax based and tax revenue would be expected.

## D. Agricultural or Industrial Production

The issuance of MAQP #5118-00 would be expected to result in the addition of 8 new full time employees. A small area of land would experience a potential change in use from agricultural to light industrial operations. Operation of the equipment and transport of the materials created by that equipment would result in an increase in industrial production. Minor impacts to agricultural and industrial production would be expected.

#### E. Human Health

MAQP #5118-00 would contain limitations and conditions derived from rules and programs designed to protect ambient air quality impacts to human health. No more than a minor impact to human health would be expected as a result of issuance of MAQP #5118-00.

## F. Access to and Quality of Recreational and Wilderness Activities

MAQP #5118-00 would not be expected to result in a direct blockage or removal of access to recreational and wilderness activities. MAQP #5118-00 would contain limitations and conditions which would limit air emissions and limit any impacts to the quality of recreational and wilderness activities. Impacts to access of and quality of recreational and wilderness activities would be expected to be minor.

#### G. Quantity and Distribution of Employment

## H. Distribution of Population

The issuance of MAQP #5118-00 would be expected to result in the direct addition of 8 new full time employees, however, MAQP #5118-00 would permit a portable operation which would likely operate in a temporary, seasonal, and intermittent nature. Secondary employment for jobs not directly related to the operations permitted in MAQP #5118-00 might occur, but would be minor. The initial location of the plant is to be in an area currently agricultural in nature. Minor impacts to quality and distribution of employment and distribution of population would be expected.

#### I. Demands for Government Services

Issuance of MAQP #5118-00 would require governmental resources regarding permitting and compliance review of the permitted operations. MAQP #5118-00 would require minor permitting, and would require a relatively low level of complexity and frequency of review. Minor impacts to Demands for government services would be required as a result of issuance of MAQP #5118-00.

## J. Industrial and Commercial Activity

MAQP #5118-00 would permit a portable crushing and screening operation. These operations are typically seasonal, intermittent, and temporary, and MAQP #5118-00 permits installation and operation of a 600 ton per hour operation. Minor impacts to industrial and commercial activity would be expected.

## K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals which issuance of MAQP #5118-00 would affect. The permit would contain conditions and limitations designed to protect human health from an ambient air impacts standpoint. Any impacts to locally adopted environmental plans and goals would be expected to be minor.

## L. Cumulative and Secondary Impacts

The Department found no more than minor impacts to the individual economic and social considerations made above. Cumulative and secondary impacts would be expected to be minor.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable crushing and screening operation. MAQP #5118-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

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

EA prepared by: Shawn Juers

Date: 2/27/2015