



Montana Department of
ENVIRONMENTAL **Q**UALITY

Brian Schweitzer, Governor

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: www.deq.mt.gov

March 2, 2012

Mike White
Nelcon Inc.
Box 5370
Kalispell, MT 59903

Dear Mr. White:

Montana Air Quality Permit #4713-00 is deemed final as of March 2, 2012, 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,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

Stephen Coe P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 782-2689 ext 209

VW:SC
Enclosures

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4713-00

Nelcon Inc.
Box 5370
Kalispell, MT 59903

March 2, 2012



MONTANA AIR QUALITY PERMIT

Issued To: Nelcon, Inc.
Box 5370
Kalispell, MT 59903

Montana Air Quality Permit: #4713-00
Application Complete: December 22, 2011
Preliminary Determination Issued: January 27, 2012
Department's Decision Issued: February 15, 2012
Permit Final: March 2, 2012
AFS #: 777-4713

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

Nelcon submitted a new permit application to install and operate a portable crushing/screening operation. New equipment includes: one jaw crusher, one cone crusher, two screens, one 425 horsepower (hp) diesel generator, and associated equipment.

B. Plant Location

Nelcon operates a portable crushing/screening operation with an original location in Section 28, Township 21 North, Range 58 East, Richland County, Montana. MAQP #4713-00 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 (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

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

- For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).
 4. Water spray bars, water, and/or chemical dust suppressant 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. Nelcon 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. Nelcon 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. Nelcon shall not operate more than two (2) crushers at any given time and the maximum combined rated capacity of the crushers shall not exceed 1,800 tons per hour (TPH) (ARM 17.8.749).
 8. Nelcon shall not operate more than two (2) screens at any given time and the maximum rated combined capacity of the screens shall not exceed 1,800 TPH (ARM 17.8.749).
 9. Nelcon shall not operate more than one (1) diesel engine driven generator at any given time and the maximum rated capacity of the Engine shall not exceed 425 hp (ARM 17.8.749).
 10. Operation of the diesel engine driving the generator shall not exceed 6,000 hours during any 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 Nelcon, 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. Nelcon shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
 13. Nelcon 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 (CI ICE)* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO). 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. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Nelcon 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, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Nelcon 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 or the addition of a new emission unit. 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(1)(d) (ARM 17.8.745).
4. Nelcon 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 Nelcon 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. Nelcon shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Nelcon shall calculate the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification – (New Equipment)

Nelcon shall provide the Department with written notification of the actual start-up date of the additional crushers and additional screen, postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Nelcon 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 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 Nelcon fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Nelcon of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Nelcon 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. Nelcon 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
Nelcon Inc.
MAQP #4713-00

I. Introduction/Process Description

Nelcon Inc. (Nelcon) owns and operates a portable crushing and screening operation.

A. Permitted Equipment

Nelcon owns and operates a portable crushing/screening facility consisting of one cone crusher, one jaw crusher, two screens, one 425 horsepower (hp) diesel engine/generator, and associated equipment.

B. Source Description

Nelcon will initially be located in Section 28, Township 21 North, Range 58 East, in Richland County, Montana. MAQP #4713-00 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* Nelcon will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

Nelcon proposed to use this crushing/screening plant and associated equipment to crush and screen sand and gravel materials for use in various construction operations. Equipment includes: one cone crusher, one jaw crusher, two screens, and a 425 hp diesel generator. The home pit is located in Richland County and Nelcon has requested the ability to operate in or near Kalispell, Montana during the summer season (April 1 – September 30). For a typical operational setup the materials are loaded into the crushing plant by a feeder, transferred by conveyor, passed through the crusher, and sent to stockpile for sale and use in construction operations.

C. Additional Information

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

II. Applicable Rules and Regulations

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

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

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

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

Nelcon 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 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide (SO₂)
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
4. ARM 17.8.213 Ambient Air Quality Standards for Ozone
5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter (PM)
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of 10 Microns or Less (PM₁₀)

Nelcon 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 (PM). (2) Under this rule, Nelcon shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR 60, NSPS, shall comply with the standards and provisions of 40 CFR 60.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to 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 Nelcon, the portable crushing equipment to be used under MAQP #4713-00 is subject to this subpart because the date of manufacture of the equipment was after August 31, 1983 (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
 - 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 Nelcon, the CI ICE equipment to be used under MAQP #4713-00 is not currently subject to this subpart because it was manufactured prior to the applicable dates. However, this subpart would become applicable if a CI ICE were modified, constructed, or reconstructed after July 11, 2005, and if they remain in a location for more than 12 months.

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. Nelcon is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (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 Nelcon, the RICE equipment to be used under MAQP #4713-00 may potentially be subject to this subpart because it operates a compression ignition RICE at an area source of HAP emissions. However since the RICE was constructed prior to June 12, 2006, and the RICE is intended to be portable Nelcon does not have to comply with the applicable emission limitations and operating limitations of 40 CFR 63, subpart ZZZZ. However, this subpart would become applicable if a RICE were modified, constructed, or reconstructed after June 12, 2005, and if they remain in a location for more than 12 months.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that 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. Nelcon submitted the appropriate permit application fee for the current application.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that 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 alteration to construct, alter, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year (TPY) of any pollutant. Nelcon has a PTE greater than 15 TPY of PM, PM₁₀, and nitrogen oxides (NOx); 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, alteration, or use of a source. Nelcon 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. Nelcon submitted an affidavit of publication of public notice for the December 14, 2011 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. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Nelcon 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 altered 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 air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 TPY of any pollutant
 - b. PTE > 10 TPY of any one Hazardous Air Pollutant (HAP), PTE > 25 TPY of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or
 - c. PTE > 70 TPY of PM₁₀ in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4713-00 for Nelcon, 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 TPY for any one HAP and less than 25 TPY of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS (40 CFR 60, Subpart OOO) and potentially subject to 40 CFR 60, Subpart IIII.
 - e. This facility is potentially subject to the area source provisions of a current NESHAP standard (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.

Nelcon requested federally-enforceable permit limitations on the diesel engine/generator to avoid modeling. Based on these facts; the Department determined that this facility is a minor source of emissions and not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit; this source will be subject to the Title V Operating Permit Program.

III. BACT Determination

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

Crushing/Screening Particulate Emissions

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

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

Diesel Engines

Due to the limited amount of emissions produced by the diesel engines used in associate with MAQP #4713-00 and the lack of cost effective add-on controls, this control approach would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel engine.

In addition, any new diesel engine would likely be required to comply with the federal engine emission limitations including, for example, EPA Tier emission standards for non-road engines (40 CFR Part 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). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engines constitutes BACT for these engines.

IV. Emission Inventory

Source	Emissions in tons/year						
	PM	PM-10	PM-2.5	NOx	VOC	CO	SOx
2 Crushers (up to 1800 TPH combined)	9.46	4.26	0.79				
2 Screens (up to 1800 TPH combined)	17.34	5.83	0.39				
Truck Unloading	0.63	0.06	0.01				
Material Transfers	6.07	1.99	0.56				
Pile Forming	12.61	5.91	0.95				
Engine/Generator (up to 425 hp)	2.81	2.81	2.81	39.53	3.15	8.52	2.61
Haul Roads	12.68	3.60	0.31				
Total Emissions	61.61	24.47	5.82	39.53	3.15	8.52	2.61

Nelcon has accepted hourly limits on the generator (6000 hours per year) to stay below the modeling threshold for NOx.

Crusher - controlled

2 Crushers (up to 1800 TPH combined)

Maximum Process Rate:: 1800 ton/hr
 Adjusted Process Rate: 1800 ton/hr
 Hours of operation: 24.00 hr/day or 8760 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: 0.0012 lb/ton * 1800 ton/hr = 2.16 lb/hr
 Daily Calculations: 2.16 lb/hr * 24 hr/day = 51.84 lb/day
 Annual Calculations: 2.16 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.46 ton/yr

PM-10

Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: 0.00054 lb/ton * 1800 ton/hr = 0.97 lb/hr
 Daily Calculations: 0.972 lb/hr * 24 hr/day= 23.33 lb/day
 Annual Calculations: 0.972 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 4.26 ton/yr

PM-2.5

Emissions:

Emission Factor:	0.00010 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.0001 \text{ lb/ton} * 2.16 \text{ lb/hr} * 24 \text{ hr/day} =$		0.18 lb/hr
Daily Calculations:	$0.18 \text{ lb/hr} * 1800 \text{ ton/hr} =$		4.32 lb/day
Annual Calculations:	$0.18 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		0.79 ton/yr

Screen - controlled
2 Screens (up to 1800 TPH combined)

Maximum Process Rate:	1800 ton/hr	
Adjusted Process Rate:	1800 ton/hr	
Hours of operation:	24.00 hr/day	or 8760 hr/yr

PM Emissions:

Emission Factor:	0.0022 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.0022 \text{ lb/ton} * 1800 \text{ ton/hr} =$		3.96 lb/hr
Daily Calculations:	$3.96 \text{ lb/hr} * 24 \text{ hr/day} =$		95.04 lb/day
Annual Calculations:	$3.96 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		17.34 ton/yr

PM-10

Emissions:

Emission Factor:	0.00074 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.00074 \text{ lb/ton} * 1800 \text{ ton/hr} =$		1.33 lb/hr
Daily Calculations:	$1.332 \text{ lb/hr} * 24 \text{ hr/day} =$		31.97 lb/day
Annual Calculations:	$1.332 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		5.83 ton/yr

PM-2.5

Emissions:

Emission Factor:	0.00005 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.00005 \text{ lb/ton} * 3.96 \text{ lb/hr} * 24 \text{ hr/day} =$		0.09 lb/hr
Daily Calculations:	$0.09 \text{ lb/hr} * 24 \text{ hr/day} =$		2.16 lb/day
Annual Calculations:	$0.09 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		0.39 ton/yr

Material Transfer - controlled
Truck
Unloading

Maximum Process Rate:	900 ton/hr	
Adjusted Process Rate:	900 ton/hr	
Number of Material Transfer	1 Load	
Hours of operation:	8760 hr/yr	or 24.00 hr/day

PM Emissions:

Emission Factor:	0.00016 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.00016 \text{ lb/ton} * 900 \text{ ton/hr} * 1 \text{ Load} =$		0.14 lb/hr
Daily Calculations:	$0.144 \text{ lb/hr} * 24 \text{ hr/day} =$		3.46 lb/day
Annual Calculations:	$0.144 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		0.63 ton/yr

PM-10

Emissions:

Emission Factor:	1.6E-05 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	$0.000016 \text{ lb/ton} * 900 \text{ ton/hr} * 1 \text{ Load} =$		0.01 lb/hr
Daily Calculations:	$0.0144 \text{ lb/hr} * 24 \text{ hr/day} =$		0.35 lb/day
Annual Calculations:	$0.0144 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} =$		0.06 ton/yr

PM-2.5

Emissions:

Emission Factor:	2.4E-06 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.000024 lb/ton * 900 ton/hr * 900 ton/hr =	0.002	lb/hr
Daily Calculations:	0.00216 lb/hr * 12.6144=	0.052	lb/day
Annual Calculations:	0.00216 lb/hr * 1 Load * 0.0005 ton/lb =	0.009	ton/yr

Material

Transfers

Maximum Process Rate:	900	ton/hr
Adjusted Process Rate:	900	ton/hr
Number of Material Transfer	11	number of Transfers
Hours of operation:	8760	hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor:	0.00014 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.00014 lb/ton * 900 ton/hr * 11 number of Transfers=	1.39	lb/hr
Daily Calculations:	1.386 lb/hr * 24 hr/day=	33.26	lb/day
Annual Calculations:	1.386 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	6.07	ton/yr

PM-10

Emissions:

Emission Factor:	4.6E-05 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.000046 lb/ton * 900 ton/hr * 11 number of Transfers =	0.46	lb/hr
Daily Calculations:	0.4554 lb/hr * 24 hr/day=	10.93	lb/day
Annual Calculations:	0.4554 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	1.99	ton/yr

PM-2.5

Emissions:

Emission Factor:	1.3E-05 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.000013 lb/ton * 900 ton/hr * 900 ton/hr =	0.13	lb/hr
Daily Calculations:	0.1287 lb/hr * 24 hr/day=	3.09	lb/day
Annual Calculations:	0.1287 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.56	ton/yr

Pile Forming (2 Piles) controlled 50% water sprays

Maximum Process Rate:	900	ton/hr
Adjusted Process Rate:	900	ton/hr
Number of Piles	2	Piles
Hours of operation:	8760	hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor:	0.0032 lb/ton	(AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0032 lb/ton * 900 ton/hr * 2 Piles*50%"=	2.88	lb/hr
Daily Calculations:	2.88 lb/hr * 24 hr/day=	69.12	lb/day
Annual Calculations:	2.88 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	12.61	ton/yr

PM-10

Emissions:

Emission Factor:	0.0015 lb/ton	(AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0015 lb/ton * 900 ton/hr * 2 Piles*50%" =	1.35	lb/hr
Daily Calculations:	1.35 lb/hr * 24 hr/day=	32.40	lb/day
Annual Calculations:	1.35 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	5.91	ton/yr

PM-2.5

Emissions:

Emission Factor:	0.00024 lb/ton	(AP-42, Section 13.2.4, 1/95)		
Hourly Calculations:	0.00024 lb/ton * 900 ton/hr * 2 Piles**50%="		0.22	lb/hr
Daily Calculations:	0.216 lb/hr * 24 hr/day=		5.18	lb/day
Annual Calculations:	0.216 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		0.95	ton/yr

Engine/Generator (up to 425 hp)

Horsepower rating= 425.00 hp

Hours of Operation: 6000 hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.0022 lb/hp-hr =		0.94	lb/hr
Daily Calculations	425 hp * 0.0022 lb/hp-hr * 24 hr/day =		22.44	lb/day
Annual Calculations	425 hp * 0.0022 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		2.81	ton/yr

PM-10 Emissions:

Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.0022 lb/hp-hr =		0.94	lb/hr
Daily Calculations	425 hp * 0.0022 lb/hp-hr * 24 hr/day =		22.44	lb/day
Annual Calculations	425 hp * 0.0022 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		2.81	ton/yr

PM-2.5 Emissions:

Emission Factor	0.0022 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	6000 hr/yr * 425 hp * 0.0022 lb/hp-hr * 24 hr/day =		0.94	lb/hr
Daily Calculations	6000 hr/yr * 0.0022 lb/hp-hr * =		22.44	lb/day
Annual Calculations	6000 hr/yr * 425 hp * 0.0022 lb/hp-hr * 24 hr/day = * 0.0005 tons/lb =		2.81	ton/yr

NOx Emissions:

Emission Factor	0.031 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.031 lb/hp-hr =		13.18	lb/hr
Daily Calculations	425 hp * 0.031 lb/hp-hr * 24 hr/day =		316.20	lb/day
Annual Calculations	425 hp * 0.031 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		39.53	ton/yr

VOC Emissions:

Emission Factor	0.00247 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.00247 lb/hp-hr =		1.05	lb/hr
Daily Calculations	425 hp * 0.00247 lb/hp-hr * 24 hr/day =		25.19	lb/day
Annual Calculations	425 hp * 0.00247 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		3.15	ton/yr

CO Emissions:

Emission Factor	0.00668 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.00668 lb/hp-hr =		2.84	lb/hr
Daily Calculations	425 hp * 0.00668 lb/hp-hr * 24 hr/day =		52.13	lb/day
Annual Calculations	425 hp * 0.00668 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		8.52	ton/yr

SOx

Emissions:

Emission Factor	0.00205 lb/hp-hr	(AP-42 Table 3.3-1,10/96)		
Hourly Calculations	425 hp * 0.00205 lb/hp-hr =		0.87	lb/hr
Daily Calculations	425 hp * 0.00205 lb/hp-hr * 24 hr/day =		20.91	lb/day
Annual Calculations	425 hp * 0.00205 lb/hp-hr * 6000 hr/yr * 0.0005 tons/lb =		2.61	ton/yr

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}

PM Emissions:

PM Emission Factor (Rated Load Capacity <50 tons):	13.90 Lbs/VMT	(AP-42, Section 13.2.2, 12/03)
PM= (5 VMT/day)(13.90 Lbs/VMT)* 24 hrs/24 hrs/day="	69.5 Lbs/day	
PM (TPY) =69.5 lbs/day *365 day/yr * 0.0005 tons/lb	12.68 tons/yr	

PM10

Emissions:

PM10 Emission Factor (Rated Load Capacity <50 tons):	3.95 Lbs/VMT	(AP-42, Section 13.2.2, 12/03)
PM= (5 VMT/day)(3.95 Lbs/VMT)* 24 hrs/24 hrs/day="	19.75 Lbs/day	
19.75 lbs/day *365 day/yr * 0.0005 tons/lb	3.60 tons/yr	

PM2.5

Emissions:

PM2.5 Emission Factor (Rated Load Capacity <50 tons):	0.34 Lbs/VMT	(AP-42, Section 13.2.2, 12/03)
PM2.5= (0 VMT/day)(0.34 Lbs/VMT)	1.7 Lbs/day	
1.7 lbs/day *365 day/yr * 0.0005 tons/lb	0.31 tons/yr	

V. Existing Air Quality

The initial location of this portable source is to be located in Section 28, Township 21 North, Range 58 East, in Richland County, Montana. The initial location and those areas for which this facility is permitted to operate under MAQP #4713-00 has been designated unclassified/attainment with all ambient air quality standards and there are no major air pollution sources in the surrounding area.

Addendum #1 to this permit will apply to the source while operating in or within 10 km of the Kalispell PM₁₀ nonattainment areas during the summer season (April 1 – September 30).

VI. Air Quality Impacts

MAQP #4713-00 regulates the crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department-approved permitting program. In the view of the Department, the allowable emissions generated by this facility are not expected exceed any set ambient standard. In addition, this source is portable and any air quality impacts are expected to be minimal and short-lived.

If the source locates and operates in or within 10 km of a PM₁₀ nonattainment area, Nelcon will be required to operate in accordance with MAQP #4713-00 and Addendum #1, which includes more stringent limits and conditions to ensure that the proposed operation does not result in additional degradation of air quality in the affected nonattainment area. A more detailed discussion and analysis of ambient impacts from operations locating in or within 10 km of certain PM₁₀ nonattainment areas is contained in the Addendum Analysis to Addendum #1 of MAQP 4713-00.

VII. Ambient Air Impact Analysis

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

VIII. Taking or Damaging Implication Analysis

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

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

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

IX. Environmental Assessment

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

Analysis Prepared By: Stephen Coe
Date: February 15, 2012

Addendum #1
Nelcon Inc.
Montana Air Quality Permit (MAQP) #4713-00

An addendum to MAQP #4713-00 is issued to Nelcon Inc. (Nelcon), 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:

I. Permitted Equipment

The facility is permitted to operate two crushers with a combined maximum material throughput capacity not to exceed 1,800 tons per hour (TPH), two screens with a combined maximum material throughput capacity not to exceed 1,800 TPH, one diesel engines/generators with a maximum rated capacity not to exceed 425 horsepower (hp), and multiple conveyors.

II. Seasonal and Site Restrictions

Addendum #1 applies to the Nelcon facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the summer season (April 1 – September 30) - The only location in or within 10 km of a PM₁₀ nonattainment area where Nelcon may operate is:
 - 1. Kalispell PM₁₀ nonattainment area.
 - 2. Any other site that may be approved, in writing, by the Montana Department of Environmental Quality (Department).
- B. During the winter season (October 1 – March 31) Nelcon may not operate in or with 10 km of any PM₁₀ nonattainment area, unless the site has been approved, in writing, by the Montana Department of Environmental Quality (Department).
- C. Nelcon shall comply with the limitations and conditions contained in Addendum #1 to MAQP #4713-00 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum #1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Limitations and Conditions – **Summer Season**

- 1. Water spray bars must be available and operated, as necessary, on the crushers, screens, and all transfer points whenever the crushing/screening plant is in operation (ARM 17.8.749 and ARM 17.8.752).
- 2. Nelcon shall not cause or authorize to be discharged into the atmosphere from any equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749). For NSPS-affected equipment constructed after April 22, 2008, for

which an opacity limitation of 7% applies (such as screens and conveyors), that 7% limit shall apply to the affected equipment (ARM17.8.340 and 40 CFR 60, Subpart OOO).

3. Nelcon shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
4. Nelcon shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749 and ARM 17.8.752).
5. Nelcon shall not operate, or have on-site, more than two (2) crushers at any one time. Total combined crusher production shall not exceed 43,200 tons per day (ARM 17.8.749).
6. Nelcon shall not operate, or have on-site, more than two (2) screens at any one time. Total combined screen production shall not exceed 43,200 tons per day (ARM 17.8.749).
7. Nelcon shall not operate, or have on-site more than one (1) diesel-fired engine generator. The maximum capacity of the engine that drives the generators shall not exceed 425 horsepower (ARM 17.8.749).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another nonattainment 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. Production information for the sites covered by this addendum must be maintained for five years and submitted to the Department upon request. The information must include (ARM 17.8.749):
 - a. Daily tons of material crushed by each crusher at each site (including amount of re-circulated/rerun material). Nelcon shall document, by day, the total crushing production. Nelcon shall sum the total crushing production for the previous day to demonstrate compliance with the limitations in Sections III.A.5.
 - b. Daily tons of material screened by each screen at each site (including amount of re-circulated/rerun material). Nelcon shall document, by day, the total screening production. Nelcon shall sum the total screening production for the previous day to demonstrate compliance with the limitations in Sections III.A.6.
 - c. Daily hours of operation at each site.
 - d. Daily hours of operation and the hp for each engine at each site.

- e. Daily tons of bulk material loaded at each site (production).
- f. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

Addendum #1 Analysis
Nelcon Inc.
Montana Air Quality Permit (MAQP) #4713-00

I. Permitted Equipment

Nelcon Inc. (Nelcon) owns and operates a portable non-metallic mineral processing operation consisting of two (2) crushers with a maximum capacity of 1,800 tons per hour (TPH) combined, two (2) screens with a maximum capacity of 1,800 TPH combined, one (1) diesel-fired engine generator with a maximum capacity rating of 425 horsepower (hp), multiple conveyors and handling equipment.

II. Source Description

Nelcon proposes to use this crushing/screening plant to crush, screen, and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crusher, materials are sent to the screen, where they are separated and conveyed to stockpiles.

III. Applicable Rules and Regulations

The following are partial quotations 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 Montana Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- A. ARM 17.8.749 Conditions for Issuance 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.
- B. 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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. ARM 17.8.765 Transfer of Permit. An air quality permit may be transferred from one location to another if:
 - 1. Written notice of Intent to Transfer location and proof of public notice are sent to the Department;
 - 2. The source will operate in the new location for a period of less than 1 year; and
 - 3. The source will not have any significant impact on any nonattainment area or any Class I area.

IV. Emission Inventory

Source (Summer Season operation)	Emissions in lbs/day						
	PM	PM-10	PM-2.5	NOx	VOC	CO	SOx
2 Crushers (up to 1800 TPH combined)	51.84	23.33	4.32				
2 Screens (up to 1800 TPH combined)	95.04	31.97	2.16				
Truck Unloading	3.46	0.35	0.05				
Material Transfers	33.26	10.93	0.05				
Pile Forming (2 Piles) controlled 50% water sprays	69.12	32.40	3.09				
Engine/Generator (up to 425 hp)	22.44	22.44	22.44	316.20	25.19	52.13	20.91
Haul Roads	69.50	19.75	1.70				
Total Emissions	344.66	141.16	33.81	316.20	25.19	52.13	20.91

Crusher - controlled

2 Crushers (up to 1800 TPH combined)

Maximum Process Rate: 1800 ton/hr
Adjusted Process Rate: 1800 ton/hr
Hours of operation: 24.00 hr/day or 8760 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.0012 lb/ton * 1800 ton/hr = 2.16 lb/hr
Daily Calculations: 2.16 lb/hr * 24 hr/day = 51.84 lb/day
Annual Calculations: 2.16 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.46 ton/yr

PM-10

Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.00054 lb/ton * 1800 ton/hr = 0.97 lb/hr
Daily Calculations: 0.972 lb/hr * 24 hr/day = 23.33 lb/day
Annual Calculations: 0.972 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 4.26 ton/yr

PM-2.5

Emissions:

Emission Factor: 0.00010 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.0001 lb/ton * 2.16 lb/hr * 24 hr/day = 0.18 lb/hr
Daily Calculations: 0.18 lb/hr * 1800 ton/hr = 4.32 lb/day
Annual Calculations: 0.18 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.79 ton/yr

Screen - controlled

2 Screens (up to 1800 TPH combined)

Maximum Process Rate: 1800 ton/hr
Adjusted Process Rate: 1800 ton/hr
Hours of operation: 24.00 hr/day or 8760 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.0022 lb/ton * 1800 ton/hr = 3.96 lb/hr
Daily Calculations: 3.96 lb/hr * 24 hr/day = 95.04 lb/day
Annual Calculations: 3.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 17.34 ton/yr

PM-10

Emissions:

Emission Factor:	0.00074 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.00074 lb/ton * 1800 ton/hr =		1.33 lb/hr
Daily Calculations:	1.332 lb/hr * 24 hr/day=		31.97 lb/day
Annual Calculations:	1.332 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		5.83 ton/yr

PM-2.5

Emissions:

Emission Factor:	0.00005 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.00005 lb/ton * 3.96 lb/hr * 24 hr/day =		0.09 lb/hr
Daily Calculations:	0.09 lb/hr * 24 hr/day=		2.16 lb/day
Annual Calculations:	0.09 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		0.39 ton/yr

Material Transfer - controlled Truck Unloading

Maximum Process Rate:	900 ton/hr	
Adjusted Process Rate:	900 ton/hr	
Number of Material Transfer	1 Load	
Hours of operation:	8760 hr/yr	or 24.00 hr/day

PM Emissions:

Emission Factor:	0.00016 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.00016 lb/ton * 900 ton/hr * 1 Load=		0.14 lb/hr
Daily Calculations:	0.144 lb/hr * 24 hr/day=		3.46 lb/day
Annual Calculations:	0.144 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		0.63 ton/yr

PM-10

Emissions:

Emission Factor:	1.6E-05 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.000016 lb/ton * 900 ton/hr * 1 Load =		0.01 lb/hr
Daily Calculations:	0.0144 lb/hr * 24 hr/day=		0.35 lb/day
Annual Calculations:	0.0144 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		0.06 ton/yr

PM-2.5

Emissions:

Emission Factor:	2.4E-06 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.0000024 lb/ton * 900 ton/hr * 900 ton/hr =		0.002 lb/hr
Daily Calculations:	0.00216 lb/hr * 12.6144=		0.052 lb/day
Annual Calculations:	0.00216 lb/hr * 1 Load * 0.0005 ton/lb =		0.009 ton/yr

Material Transfers

Maximum Process Rate:	900 ton/hr	
Adjusted Process Rate:	900 ton/hr	
Number of Material Transfer	11 number of Transfers	
Hours of operation:	8760 hr/yr	or 24.00 hr/day

PM Emissions:

Emission Factor:	0.00014 lb/ton	(AP-42, Section 11.19.2-2, 8/04)	
Hourly Calculations:	0.00014 lb/ton * 900 ton/hr * 11 number of Transfers=		1.39 lb/hr
Daily Calculations:	1.386 lb/hr * 24 hr/day=		33.26 lb/day
Annual Calculations:	1.386 lb/hr * 8760 hr/yr * 0.0005 ton/lb =		6.07 ton/yr

PM-10

Emissions:

Emission Factor: 4.6E-05 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 0.00046 lb/ton * 900 ton/hr * 11 number of
 Hourly Calculations: Transfers = 0.46 lb/hr
 Daily Calculations: 0.4554 lb/hr * 24 hr/day= 10.93 lb/day
 Annual Calculations: 0.4554 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.99 ton/yr

PM-2.5

Emissions:

Emission Factor: 1.3E-05 lb/ton (AP-42, Section 11.19.2-2, 8/04)
 Hourly Calculations: 0.00013 lb/ton * 900 ton/hr * 900 ton/hr = 0.13 lb/hr
 Daily Calculations: 0.1287 lb/hr * 24 hr/day= 3.09 lb/day
 Annual Calculations: 0.1287 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.56 ton/yr

Pile Forming (2 Piles) controlled 50% water sprays

Maximum Process Rate: 900 ton/hr
 Adjusted Process Rate: 900 ton/hr
 Number of Piles 2 Piles
 Hours of operation: 8760 hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor: 0.0032 lb/ton (AP-42, Section 13.2.4, 1/95)
 Hourly Calculations: 0.0032 lb/ton * 900 ton/hr * 2 Piles*50%"= 2.88 lb/hr
 Daily Calculations: 2.88 lb/hr * 24 hr/day= 69.12 lb/day
 Annual Calculations: 2.88 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 12.61 ton/yr

PM-10

Emissions:

Emission Factor: 0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)
 Hourly Calculations: 0.0015 lb/ton * 900 ton/hr * 2 Piles*50%" = 1.35 lb/hr
 Daily Calculations: 1.35 lb/hr * 24 hr/day= 32.40 lb/day
 Annual Calculations: 1.35 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 5.91 ton/yr

PM-2.5

Emissions:

Emission Factor: 0.00024 lb/ton (AP-42, Section 13.2.4, 1/95)
 Hourly Calculations: 0.00024 lb/ton * 900 ton/hr * 2 Piles*"50%"= 0.22 lb/hr
 Daily Calculations: 0.216 lb/hr * 24 hr/day= 5.18 lb/day
 Annual Calculations: 0.216 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.95 ton/yr

Engine/Generator (up to 425 hp)

Horsepower rating= 425.00 hp

Hours of Operation: 6000 hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor 0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96)
 Hourly Calculations 425 hp * 0.0022 lb/hp-hr = 0.94 lb/hr
 Daily Calculations 425 hp * 0.0022 lb/hp-hr * 24 hr/day = 22.44 lb/day

Annual Calculations	$425 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	2.81	ton/yr
PM-10 Emissions:			
Emission Factor	0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$425 \text{ hp} * 0.0022 \text{ lb/hp-hr} =$	0.94	lb/hr
Daily Calculations	$425 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	22.44	lb/day
Annual Calculations	$425 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	2.81	ton/yr
PM-2.5 Emissions:			
Emission Factor	0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$6000 \text{ hr/yr} * 425 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	0.94	lb/hr
Daily Calculations	$6000 \text{ hr/yr} * 0.0022 \text{ lb/hp-hr} * =$	22.44	lb/day
Annual Calculations	$6000 \text{ hr/yr} * 425 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 24 \text{ hr/day} = * 0.0005 \text{ tons/lb} =$	2.81	ton/yr
NOx Emissions:			
Emission Factor	0.031 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$425 \text{ hp} * 0.031 \text{ lb/hp-hr} =$	13.18	lb/hr
Daily Calculations	$425 \text{ hp} * 0.031 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	316.20	lb/day
Annual Calculations	$425 \text{ hp} * 0.031 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	39.53	ton/yr
VOC Emissions:			
Emission Factor	0.00247 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$425 \text{ hp} * 0.00247 \text{ lb/hp-hr} =$	1.05	lb/hr
Daily Calculations	$425 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	25.19	lb/day
Annual Calculations	$425 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	3.15	ton/yr
CO Emissions:			
Emission Factor	0.00668 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$425 \text{ hp} * 0.00668 \text{ lb/hp-hr} =$	2.84	lb/hr
Daily Calculations	$425 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	52.13	lb/day
Annual Calculations	$425 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	8.52	ton/yr
SOx Emissions:			
Emission Factor	0.00205 lb/hp-hr (AP-42 Table 3.3-1,10/96)		
Hourly Calculations	$425 \text{ hp} * 0.00205 \text{ lb/hp-hr} =$	0.87	lb/hr
Daily Calculations	$425 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 24 \text{ hr/day} =$	20.91	lb/day
Annual Calculations	$425 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 6000 \text{ hr/yr} * 0.0005 \text{ tons/lb} =$	2.61	ton/yr

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}

PM Emissions:

PM Emission Factor (Rated Load Capacity <50 tons): 13.90 Lbs/VMT (AP-42, Section 13.2.2, 12/03)
PM= (5 VMT/day)(13.90 Lbs/VMT)* 24
hrs/24 hrs/day=" 69.5 Lbs/day
PM (TPY) =69.5 lbs/day *365 day/yr *
0.0005 tons/lb 12.68 tons/yr

PM10

Emissions:

PM10 Emission Factor (Rated Load Capacity <50 tons): 3.95 Lbs/VMT (AP-42, Section 13.2.2, 12/03)
PM= (5 VMT/day)(3.95 Lbs/VMT)* 24
hrs/24 hrs/day=" 19.75 Lbs/day
19.75 lbs/day *365 day/yr * 0.0005
tons/lb 3.60 tons/yr

PM2.5

Emissions:

PM2.5 Emission Factor (Rated Load Capacity <50 tons): 0.34 Lbs/VMT (AP-42, Section 13.2.2, 12/03)
PM2.5= (0 VMT/day)(0.34 Lbs/VMT) 1.7 Lbs/day
1.7 lbs/day *365 day/yr * 0.0005 tons/lb 0.31 tons/yr

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). Due to exceedance of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM₁₀ emissions.

MAQP #4713-00 and Addendum #1 are for a portable crushing/screening plant that will potentially operate at sites in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects on air quality will be minor and short-lived.

VI. Air Quality Impacts

MAQP #4713-00 and Addendum #1 will cover the operations of this portable crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program.

Addendum #1 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of the Kalispell PM₁₀ nonattainment areas during the summer months.

VII. Taking or Damaging Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment (see Section VIII of the Permit Analysis for MAQP #4713-00) and determined there are no taking or damaging implications.

VIII. Environmental Assessment

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

Addendum Analysis Prepared By: Stephen Coe

Date: February 15, 2012

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Nelcon Inc.
Box 5370
Kalispell, MT 59903

Montana Air Quality Permit number: 4713-00
Preliminary Determination Issued: January 27, 2012
Department Decision Issued: February 15, 2012
Permit Final: March 2, 2012

1. **Legal Description of Site:** Nelcon submitted an application to add additional equipment and operate a crushing/screening operation to be located in Section 28, Township 21 North, Range 58 East, in Richland County, Montana. MAQP #4713-00 would apply to the source while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* Nelcon would be required to obtain an addendum to this MAQP to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.
2. **Description of Project:** Nelcon submitted a request to obtain a new permit to operate a crushing screening operation. New equipment includes: one jaw crusher, one cone crusher, two screens and one 425 horse power (hp) diesel generator.
3. **Objectives of Project:** The object of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of MAQP #4713-00 would allow Nelcon to operate the permitted equipment at various locations throughout 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 Nelcon 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 Best Available Control Technology (BACT) analysis, would be included in MAQP #4713-00.
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			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			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

Terrestrials would use the same area as the crushing and screening operation. The crushing and screening operation would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life because of the additional equipment could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition would occur. The facility is located approximately 1,500 meters from the Yellowstone River. Therefore, only minor and temporary effects to aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor impact to the water quality, quantity, and distribution in the area, since only small amounts of water would be required to control air pollutant emissions and deposition of air pollutants (as described in Section 7.F of this EA).

C. Geology and Soil Quality, Stability and Moisture

Because the equipment will be operating at a facility which is a minor source of emissions by industrial standards, impacts from the emissions from the crushing facility would be minor.

The crushing and screening operation would have only minor impacts on soils in any proposed site location (due to the construction and use of the crushing facility) because the facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Therefore, any effects upon geology and soil quality, stability, and moisture at any proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the additional equipment would be a minor source of emissions by industrial standards, impacts from the emissions from the crushing and screening facility would be minor.

As described in Section 7.F of this EA, the amount of air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor.

E. Aesthetics

The equipment would be visible and would create additional noise while operating in these areas. However, MAQP #4713-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing and screening operation is portable, would operate on an intermittent and seasonal basis, and would typically locate within an open-cut pit, any visual and noise impacts would be minor and short-lived.

F. Air Quality

The air quality impacts from the equipment would be minor because the facility is relatively small. MAQP #4713-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP #4713-00 would limit total emissions from the crushing and screening operation and any additional Nelcon equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

This facility would be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening operation would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction) and would have minimal deposition on the surrounding area. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique, endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are such environmental resources found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. *Zapus hudsonius* (Meadow Jumping Mouse), *Catharus fuscescens* (Veery), *Ardea Herodias* (Great Blue Heron), *Grus americana* (Whooping Crane), *Sternula Antillarum* (Least Tern), *Scaphirhynchus albus* (Pallid Sturgeon), *Polyodon spathula*, (Paddlefish), *Lepisosteus platostomus* (Shortnose Gar), *Macrhybopsis gelida* (Sturgeon Chub), *Macrhybopsis meeki* (Sicklefin Chub), *Cycleptus elongates* (Blue Sucker), *Sander Canadensis* (Sauger), *Lasiurus cinereus* (Hoary Bat), *Apalone spinifera* (Spiny Softshell) are species of concern in the area. These species potential location has been identified both within and outside the defined area.

Given the relatively small size of the facility and the temporary and portable nature of the operations, any impacts would be minor and short-lived. Additionally, operational conditions and limitations within MAQP #4713-00 would aid in the protection of these resources by protecting the surrounding environment. Therefore, impacts to unique, endangered, fragile, or limited environmental resources would be minor.

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

Due to the size of the facility, the crushing and screening operation would require only small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control particulate emissions being generated at the site. Energy requirements would also be small because the energy demands of the crushing and screening operation would be relatively small and the facility would not be used continuously. The facility would have limited production, and would have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Therefore, any impacts to water, air, and energy resources in any given area would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites located near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there are no previously recorded historic or archaeological sites within the proposed area. However, SHPO stated that the absence of cultural properties in the area does not mean that they do not exist, but may reflect a lack of previous cultural resource inventories in the area. The Department determined that the chance of the project impacting any historical and archaeological sites in the area would be minor due to the relatively small size of the project. However, should cultural materials be inadvertently discovered during this project SHPO requests that their office be contacted and the site investigated?

J. Cumulative and Secondary Impacts

The additional equipment would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of PM and PM₁₀. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

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

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

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

A. Social Structures and Mores

The additional equipment at the crushing and screening operation would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions (by industrial standards) and would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4713-00. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result.

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 will be located on ground previously used as irrigated hay ground. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Therefore, predominant use of the surrounding areas would experience minor change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The equipment would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source) and would be used on a seasonal and intermittent basis. The facility would likely add five additional employees. Thus, only minor, impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The equipment at the crushing and screening operation would have only a minor impact on local industrial production since the facility is a minor source of emissions (by industrial standards). There could be minor effects on agricultural land from the deposition of pollutants (as described in Section 7.F of this EA) but, the facility operations would be small and temporary in nature, and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation (as described in Section 7.D of this EA).

E. Human Health

MAQP #4713-00 would incorporate conditions to ensure that the crushing facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other conditions that would be established in Permit #4713-00, though the facility's air emissions would be quite small without the use of pollution controls. Therefore, only minor impacts would be expected upon human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

The equipment at the crushing plant would typically operate within the confines of an open-cut pit. Therefore, only minor impacts upon the access to and quality of recreational and wilderness activities would result. Additionally, noise from the facility would be minor because the facility would typically operate within the confines of an existing open-cut pit. Also, the facility would operate on a seasonal and intermittent basis and would be relatively small by industrial standards. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The portable crushing and screening operation is small and would only require a few additional employees to operate. The crushing and screening operation is a small, portable source, with seasonal and intermittent operations and would not be expected to have any long-term effects upon the quantity and distribution of employment in any given area of operation. Therefore, no effects upon the quantity and distribution of employment in these areas would be expected.

H. Distribution of Population

The portable crushing and screening operation is small and would only require a few additional employees to operate. Also, no individuals would be expected to permanently relocate to a given area of operation as a result of operating the crushing facility, which would have only intermittent and seasonal operations. Therefore, the crushing facility would not disrupt the normal population distribution in a given area of operation.

I. Demands for Government Services

Little or no increases would be seen in traffic on existing roadways in a given area while the crushing and screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies and determining compliance with the permits. Overall, the demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing and screening operation would represent little or no increase in the industrial activity in any given area because the source would be a minor source (relatively small in size by industrial standards) and would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would affect Nelcon. The facility would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. MAQP #4713-00 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing and screening operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source is a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate areas, thus, having a direct effect on the social environment. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Thus, only minor and temporary cumulative effects would result to the local economy.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable crushing/screening facility. MAQP #4713-00 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: Stephen Coe P.E.

Date: January 27, 2012