



Montana Department of
ENVIRONMENTAL **Q**UALITY

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March 27, 2012

Mr. Sam Meyers
Nelcon, Inc.
P.O. Box 5370
Kalispell, MT 59903

Dear Mr. Meyers:

Montana Air Quality Permit #4720-00 is deemed final as of March 27, 2012, by the Department of Environmental Quality (Department). This permit is for a portable concrete batch plant. 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) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4720-00

Nelcon, Inc.
P.O. Box 5370
Kalispell, MT 59903

March 27, 2012



MONTANA AIR QUALITY PERMIT

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

MAQP: #4720-00
Application Complete: 2/10/2012
Preliminary Determination Issued: 2/22/2012
Department's Decision Issued: 3/9/2012
Permit Final: 3/27/2012
AFS #: 777-4720

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 proposes to operate a portable concrete batch plant capable of 200 cubic yards per hour (cy/hr), powered by a generator with engine rating not to exceed 425 horsepower (hp). The current equipment controls particulate emissions through an in-truss jet pulse dust collector and a dust shroud.

B. Plant Location

Nelcon proposes to operate a portable concrete batch plant, which will initially be located in Section 28, Township 21 North, Range 58 East, in Richland County. However, MAQP #4720-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.*

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Nelcon shall not cause or authorize to be discharged into the atmosphere from the concrete batch plant operations, including all associated equipment, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.752, ARM 17.8.304).
2. 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).
3. 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.2 (ARM 17.8.749).
4. Nelcon 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 425 hp (ARM 17.8.749).

5. The maximum rated capacity of the feed conveyor shall not exceed 300 tons per hour (ARM 17.8.749).
6. The maximum rated capacity of the concrete plant shall not exceed 200 cy/hr (ARM 17.8.749).
7. Operation of the concrete batch plant and associated equipment (including the generator engine) shall not exceed 6,000 hours during any rolling 12-month period (ARM 17.8.749).
8. Cement production shall not exceed 1,200,000 cubic yards during any rolling 12-month period (ARM 17.8.749).
9. 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).
10. Nelcon shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 Code of Federal Regulations (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. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this concrete batch 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. 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, 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. 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 generator engine and concrete plant. By the 25th day of each month, Nelcon shall total the hours of operation for the diesel generator engine and the concrete plant for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Nelcon shall document, by month, the total concrete production in cubic yards. By the 25th day of each month, Nelcon shall total the total concrete production for the previous month, and calculate and record the rolling 12 month sum. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

Nelcon shall provide the Department with written notification of the actual start-up date of the plant 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 (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 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 #4720-00

I. Introduction/Process Description

Nelcon, Inc. (Nelcon) proposes to operate a portable concrete batch plant capable of 200 cubic yards per hour (cy/hr), powered by a generator with engine rating not to exceed 425 horsepower (hp). The current equipment controls particulate emissions through an in-truss jet pulse dust collector and a dust shroud.

A. Permitted Equipment

Nelcon proposes to operate a portable concrete batch plant which includes, but is not limited to, the following equipment:

- 300 ton per hour (TPH) Feed Conveyor
- 200 cy/hr HT Haganator
- 200 cy/hr cement/fly ash silo
- 425 hp generator engine
- Associated equipment

B. Source Description

The portable concrete batch plant is used to mix concrete for transfer to cement trucks. Aggregate material is fed into the feed conveyor via front loader. Sand and gravel is mixed with cement from the silo and water in the plant process. Fly ash is added when needed. The material is loaded into mixer trucks for transport.

The initial location of this portable facility is Section 28, Township 21 North, Range 58 East, in Richland County, Montana. Nelcon's home pit is located at Section 36, Township 30 North, Range 21 West in Flathead County. The equipment is not permitted to operate at the home pit location because the home pit location is in a non-attainment area. The need for return of the equipment to the home pit location between jobs is not expected, however, should the equipment need to be stored; the home pit location would be used for that purpose.

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

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

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 17.8.204 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
7. ARM 17.8.221 Ambient Air Quality Standard for Visibility
8. ARM 17.8.222 Ambient Air Quality Standard for Lead
9. ARM 17.8.223 Ambient Air Quality Standard for 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. (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 Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 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 and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR Part 60), Standards of Performance for New Stationary Sources (NSPS). Nelcon is considered a potentially affected NSPS facility under 40 CFR Part 60 and may be subject to the requirements of the following subparts.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart III - 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.
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 potentially affected NESHAP facility under 40 CFR Part 63 and may be subject to the requirements of the following subparts.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Therefore Nelcon is potentially subject to this subpart.

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 permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Nelcon has a PTE greater than 15 tons per year of particulate matter, particulate matter with an aerodynamic diameter of 10 microns or less, particulate matter with an aerodynamic diameter of 2.5 microns or less, and oxides of nitrogen; 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. 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 January 22, 2012 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 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 modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality

permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (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 #4720 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 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is potentially subject to current NSPS.
 - e. This facility is potentially subject to current NESHAP standards.
 - 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 Nelcon 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, Nelcon may be required to obtain a Title V Operating Permit.

III. BACT Determination

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

A. Concrete Batch Operation

1. Particulate Emissions

Nelcon proposed the utilization of an in-truss dust collection system which comes standard with the HT-Series Haganator Travel-All concrete batch plant proposed for operation. The in-truss dust collection system consists of the equivalent of a baghouse, with a jet-pulsed cleaning design, which collects dust from the enclosed concrete batch system. The central dust collector is installed in-line on the mobile plant and eliminates the need for a separate load of freight. Removal efficiencies of over 99% is expected.

The load out is equipped with a dust shroud designed for high efficiency dust collection.

The Department determined that this equipped, operated to ensure compliance with the general opacity rule of 20% opacity, constitutes BACT for this source. The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

2. Fugitive Visible Emissions

Two types of emission controls are readily available and used for dust suppression of fugitive emissions that result from the operation of equipment and associated activities. These two control methods are water and chemical dust suppressant. Both suppressants could be used for dust control for the area surrounding the concrete plant and for emissions from the handling of aggregate materials. However, in view of the fact that water is more readily available, more cost effective, is equally effective as chemical dust suppressant, while presenting less potential environmental quality degradation, water has been identified as the most appropriate method of pollution control of particulate emissions. In addition, water suppression has been required of recently permitted similar sources. However, Nelcon has the option to use chemical dust suppressant to assist in controlling particulate emissions.

The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the operation for the additional equipment.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

B. Diesel Engines

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.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory**

Nelcon, Inc.							
MAQP #4720-00							
Source	PM	PM₁₀	PM_{2.5}	NO_x	CO	VOC	SO_x
Aggregate delivery to ground storage	6.21	2.97	0.93				
Sand delivery to ground storage	1.89	0.89	0.28				
Aggregate transfer to conveyor	6.21	2.97	0.93				
Sand transfer to conveyor	1.89	0.89	0.28				
Aggregate transfer to elevated storage	6.21	2.97	0.93				
Sand transfer to elevated storage	1.89	0.89	0.28				
Cement delivery to Silo	0.14	0.05	0.02				
Cement supplement delivery to Silo	0.19	0.11	0.03				
Truck mix loading	15.96	4.28	2.39				
Generator Engine	2.81	2.81	2.81	39.53	8.52	3.21	2.61
Haul Roads	5.49	1.51	0.15				
TOTAL:	48.89	20.34	9.04^a	39.53^a	8.52	3.21	2.61

Footnotes:

a. Inventory reflects enforceable limits on hours of operation to keep allowable emissions below the NO_x (40 TPY) and PM_{2.5} (12 TPY) modeling thresholds. The Post BACT potential to emit of the facility is below 100 TPY for any regulated pollutant; therefore, this source is a true minor.

** CO = carbon monoxide
 HAPs = hazardous air pollutants
 hp = horsepower
 hr = hour
 lb = pound
 N/A = not applicable
 ND = no data available
 NO_x = oxides of nitrogen

PM = particulate matter
 PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less
 PM_{2.5} = particulate matter with an aerodynamic diameter of 2.5 microns or less
 SO_x = oxides of sulfur
 TPH = tons per hour
 TPY = tons per year
 VOC = volatile organic compounds
 VMT = vehicle miles traveled
 yr = year

Aggregate delivery to ground storage

Max Process Rate: 300 Ton/hr (MAQP #4720-00, Nelcon Response to incomplete letter)
 Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0069 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0069lb/ton*300Ton/hr= 2.07 lb/hr
 2.07lb/hr*6000hr/yr*0.0005ton/lb = **6.21 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.0033 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0033lb/ton*300Ton/hr= 0.99 lb/hr
 0.99lb/hr*6000hr/yr*0.0005ton/lb = **2.97 ton/yr**

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.001035 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM2.5 = 15% of PM, 09/90)
 Calculations: 0.001035lb/ton*300Ton/hr= 0.3105 lb/hr
 0.3105lb/hr*6000hr/yr*0.0005ton/lb = **0.93 ton/yr**

Sand delivery to ground storage

Max Process Rate: 300 Ton/hr
 Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0021 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0021lb/ton*300Ton/hr= 0.63 lb/hr
 0.63lb/hr*6000hr/yr*0.0005 ton/lb = **1.89 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.00099 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.00099lb/ton*300Ton/hr= 0.297 lb/hr

$$0.297\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ ton/lb} = \mathbf{0.89\text{ ton/yr}}$$

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.000315 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM_{2.5} = 15% of PM, 09/90)

Calculations: 0.000315lb/ton*300Ton/hr= 0.0945 lb/hr

$$0.0945\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ ton/lb} = \mathbf{0.28\text{ ton/yr}}$$

Aggregate transfer to conveyor

Max Process Rate: 300 Ton/hr (MAQP #4720-00, Nelcon Response to incomplete letter)

Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0069 lb/ton (AP-42 Table 11.12-2, 6/06)

Calculations: 0.0069lb/ton*300Ton/hr= 2.07 lb/hr

$$2.07\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ton/lb} = \mathbf{6.21\text{ ton/yr}}$$

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.0033 lb/ton (AP-42 Table 11.12-2, 6/06)

Calculations: 0.0033lb/ton*300Ton/hr= 0.99 lb/hr

$$0.99\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ton/lb} = \mathbf{2.97\text{ ton/yr}}$$

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.001035 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM_{2.5} = 15% of PM, 09/90)

Calculations: 0.001035lb/ton*300Ton/hr= 0.3105 lb/hr

$$0.3105\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ton/lb} = \mathbf{0.93\text{ ton/yr}}$$

Sand transfer to conveyor

Max Process Rate: 300 Ton/hr

Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0021 lb/ton (AP-42 Table 11.12-2, 6/06)

Calculations: 0.0021lb/ton*300Ton/hr= 0.63 lb/hr

$$0.63\text{lb/hr} \times 6000\text{hr/yr} \times 0.0005\text{ ton/lb} = \mathbf{1.89\text{ ton/yr}}$$

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.00099 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.00099lb/ton*300Ton/hr= 0.297 lb/hr
 0.297lb/hr*6000hr/yr*0.0005 ton/lb = **0.89 ton/yr**

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.000315 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM2.5 = 15% of PM, 09/90)
 Calculations: 0.000315lb/ton*300Ton/hr= 0.0945 lb/hr
 0.0945lb/hr*6000hr/yr*0.0005 ton/lb = **0.28 ton/yr**

Aggregate transfer to elevated storage

Max Process Rate: 300 Ton/hr (MAQP #4720-00, Nelcon Response to incomplete letter)
 Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0069 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0069lb/ton*300Ton/hr= 2.07 lb/hr
 2.07lb/hr*6000hr/yr*0.0005ton/lb = **6.21 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.0033 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0033lb/ton*300Ton/hr= 0.99 lb/hr
 0.99lb/hr*6000hr/yr*0.0005ton/lb = **2.97 ton/yr**

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.001035 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM2.5 = 15% of PM, 09/90)
 Calculations: 0.001035lb/ton*300Ton/hr= 0.3105 lb/hr
 0.3105lb/hr*6000hr/yr*0.0005ton/lb = **0.93 ton/yr**

Sand transfer to elevated storage

Max Process Rate: 300 Ton/hr (MAQP #4720-00, Nelcon Response to incomplete letter)
 Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions Factor: 0.0021 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.0021lb/ton*300Ton/hr= 0.63 lb/hr
 0.63lb/hr*6000hr/yr*0.0005 ton/lb = **1.89 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.00099 lb/ton (AP-42 Table 11.12-2, 6/06)
 Calculations: 0.00099lb/ton*300Ton/hr= 0.297 lb/hr
 0.297lb/hr*6000hr/yr*0.0005 ton/lb = **0.89 ton/yr**

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.000315 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM_{2.5} = 15% of PM, 09/90)
 Calculations: 0.000315lb/ton*300Ton/hr= 0.0945 lb/hr
 0.0945lb/hr*6000hr/yr*0.0005 ton/lb = **0.28 ton/yr**

Cement delivery to Silo (in-truss)

Max Process Rate: 200 cubic yards/hr (MAQP #4720-00, Nelcon Response to incomplete letter)
 Hours of Operation: 6000 hr/yr

Assumed Makeup of Cement: 3923 lb/cubic yard
 Aggregate: 1900 lbs (applicant correspondences)
 Sand: 1230 lbs (applicant correspondences)
 Cement: 470 lbs (applicant correspondences)
 Cement Supplement: 73 lbs (AP-42 11.12-8 note a - 6/2006)
 Water: 250 lbs (applicant correspondences)

Cement delivery to Silo (in-truss)

PM Emissions (Filterable)

Emissions Factor: 0.00099 lb/ton (AP-42 Table 11.12-2, 6/06)
 Cement Rate: 47 ton/hr
 Calculations: 47ton/hr*0.00099lb/ton= 0.04653 lb/hr
 0.04653lb/hr*6000hr/yr*0.0005ton/lb = **0.14 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions Factor: 0.00034 lb/ton (AP-42 Table 11.12-2, 6/06)
 Cement Rate: 47 ton/hr
 Calculations: 47ton/hr*0.00034lb/ton= 0.01598 lb/hr

$$0.01598 \text{ lb/hr} * 6000 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{0.05 \text{ ton/yr}}$$

PM_{2.5} Emissions (Filterable)

Emissions Factor: 0.0001485 lb/ton (AP-42, Appendix B.2, Table B.2.2, Category 3, PM_{2.5} = 15% of PM, 09/90)
 Cement Rate: 47 ton/hr
 Calculations: 47ton/hr*0.0001485lb/ton= 0.00698 lb/hr
 0.0069795lb/hr*6000hr/yr*0.0005 ton/lb = **0.02 ton/yr**

Cement supplement delivery to Silo (in truss)

PM Emissions (Filterable)

(AP-42 Table 11.12-2, 6/06)
 Emissions Factor: 0.0089 lb/ton
 Cement Rate: 7.3 ton/hr
 Calculations: 7.3ton/hr*0.0089lb/ton= 0.06497 lb/hr
 0.06497lb/hr*6000hr/yr*0.0005 ton/lb = **0.19 ton/yr**

PM₁₀ Emissions (Filterable)

(AP-42 Table 11.12-2, 6/06)
 Emissions Factor: 0.0049 lb/ton
 Cement Rate: 7.3 ton/hr
 Calculations: 7.3ton/hr*0.0049lb/ton= 0.03577 lb/hr
 0.03577lb/hr*6000hr/yr*0.0005 ton/lb = **0.11 ton/yr**

PM_{2.5} Emissions (Filterable)

(AP-42, Appendix B.2, Table B.2.2, Category 3, PM_{2.5} = 15% of PM, 09/90)
 Emissions Factor: 0.00134 lb/ton
 Cement Rate: 7.3 ton/hr
 Calculations: 7.3ton/hr*0.001335lb/ton= 0.009746 lb/hr
 0.0097455lb/hr*6000hr/yr*0.0005 ton/lb = **0.03 ton/yr**

Truck Mix Loading (AP-42 Table 11.12-2, 6/06)

Maximum Throughput:

Assumed Makeup of Cement:	3923	lb/cubic yard	
Aggregate:	1900	lbs	(applicant correspondence)
Sand:	1230	lbs	(applicant correspondence)
Cement:	470	lbs	(applicant correspondence)
Cement Supplement:	73	lbs	(AP-42 11.12-8 note a - 6/2006)
Water:	250	lbs	(applicant correspondence)

Hours of Operation: 6000 hr/yr

PM Emissions (Filterable)

Emissions
Factor: 0.098 lb/ton of cement and cement supplement
Calculations: 1 cy = 543 lbs cement and cement supplement
200 cy/hour = 54.3 ton/hr cement and cement supplement
54.3ton/hr cement and cement supplement*0.098lb/ton of cement and cement supplement=
5.3214lb/hr*6000hr/yr*0.0005 ton/lb= **15.96 ton/yr**

PM₁₀ Emissions (Filterable)

Emissions
Factor: 0.0263 lb/ton of cement and cement supplement
Calculations: 1 cy = 543 lbs cement and cement supplement
200 cy/hour = 54.3 ton/hr cement and cement supplement
54.3ton/hr cement and cement supplement*0.0263lb/ton of cement and cement supplement=
1.42809lb/hr**0.0005 ton/lb= **4.28 ton/yr**

PM_{2.5} Emissions (Filterable)

Emissions
Factor: 0.0147 lb/ton of cement and cement supplement (15% of PM)
Calculations: 1 cy = 543 lbs cement and cement supplement
200 cy/hour = 54.3 ton/hr cement and cement supplement
54.3ton/hr cement and cement supplement*0.0147lb/ton of cement and cement supplement (15% of PM)=
0.79821lb/hr**0.0005 ton/lb= **2.39 ton/yr**

Generator Engine (AP-42 Table 3.3-1, 10/1996)

Maximum rated
hp: 425 hp
Hours of
Operation: 6000 hr/yr

PM/PM₁₀/PM_{2.5} Emissions

Emissions Factor: 0.0022 lb/hp-hr
 Calculations: 0.0022lb/hp-hr*425hp= 0.935 lb/hr
 0.935lb/hr*6000hr/yr*0.0005ton/lb = **2.81 ton/yr**

NO_x Emissions

Emissions Factor: 0.031 lb/hp-hr
 Calculations: 0.031lb/hp-hr*425hp= 13.175 lb/hr
 13.175lb/hr*6000hr/yr*0.0005 ton/lb = **39.53 ton/yr**

CO Emissions

Emissions Factor: 0.00668 lb/hp-hr
 Calculations: 0.00668lb/hp-hr*425hp= 2.839 lb/hr
 2.839lb/hr*6000hr/yr*0.0005 ton/lb = **8.52 ton/yr**

VOC Emissions

Emissions Factor: 0.002514 lb/hp-hr
 Calculations: 0.002514lb/hp-hr*425hp= 1.068493 lb/hr
 1.0684925lb/hr*6000hr/yr*0.0005 ton/lb = **3.21 ton/yr**

SO_x Emissions

Emissions Factor: 0.00205 lb/hp-hr
 Calculations: 0.00205lb/hp-hr*425hp= 0.87125 lb/hr
 0.87125lb/hr*6000hr/yr*0.0005 ton/lb = **2.61 ton/yr**

Haul Roads and Front Loader Traffic

(AP-42 13.2.2, 11/2006)

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

Constant	Industrial Roads (Equation 1a)		
	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45
c	-	-	-
d	-	-	-
Quality Rating	B	B	B

k, a, b = empirical

constants

s = surface material silt content (%)

W = mean Vehicle Weight (tons)

Vehicle Miles Traveled = 5 miles/day (estimated)

PM Emissions

Emissions Factor Development:

k = 4.9

a = 0.7

b = 0.45

s = 7.1 (AP-42 Table 13.2.2-1, 11/2006)

W = 50 tons

E = 12.04 lb/VMT

Calculations:

$12.036 \text{ lb/VMT} * 5 \text{ miles/day}$
(estimated) = 60.18 lb/day
 $60.17997369366 \text{ lb/day} * 365 \text{ day/yr} = 21965.69 \text{ lb/yr}$
 $21965.6903981859 \text{ lb/yr} * 0.0005 \text{ ton/lb}$
= 10.98 ton/yr

50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition)
(Department Guidance)

$10.9828451990929 \text{ ton/yr} * 0.50 = 5.49 \text{ ton/yr}$

PM₁₀ Emissions

Emissions Factor Development:

k = 1.5

a = 0.9

b = 0.45

s = 7.1 (AP-42 Table 13.2.2-1, 11/2006)

W = 50 tons

E = 3.32 lb/VMT

Calculations:

$3.317 \text{ lb/VMT} * 5 \text{ miles/day} = 16.59 \text{ lb/day}$

$$\begin{aligned}
 & \text{(estimated)}= \\
 & 16.5867994294458\text{lb/day} * 365 \text{ day/yr} \\
 & = \qquad \qquad \qquad 6054.18 \text{ lb/yr} \\
 & 6054.1817917477\text{lb/yr} * 0.0005\text{ton/lb} \\
 & = \qquad \qquad \qquad 3.03 \text{ ton/yr}
 \end{aligned}$$

50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition)
(Department Guidance)

$$3.02709089587385\text{ton/yr} * 0.50 = \qquad \qquad \qquad \mathbf{1.51 \text{ ton/yr}}$$

PM_{2.5} Emissions

Emissions Factor Development:

$$\begin{aligned}
 k &= 0.15 \\
 a &= 0.9 \\
 b &= 0.45 \\
 s &= 7.1 \text{ (AP-42 Table 13.2.2-1, 11/2006)} \\
 W &= 50 \text{ tons} \\
 \\ \\
 E &= 0.33 \text{ lb/VMT}
 \end{aligned}$$

Calculations:

$$\begin{aligned}
 & 0.332\text{lb/VMT} * 5\text{miles/day} \\
 & \text{(estimated)}= \qquad \qquad \qquad 1.66 \text{ lb/day} \\
 & 1.65867994294458\text{lb/day} * 365 \text{ day/yr} \\
 & = \qquad \qquad \qquad 605.42 \text{ lb/yr} \\
 & 605.41817917477\text{lb/yr} * 0.0005\text{ton/lb} \\
 & = \qquad \qquad \qquad 0.3 \text{ ton/yr}
 \end{aligned}$$

50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition)
(Department Guidance)

$$0.302709089587385\text{ton/yr} * 0.50 = \qquad \qquad \qquad \mathbf{0.15 \text{ ton/yr}}$$

V. Existing Air Quality

This permit is for a portable facility to originally be located in Section 28, Township 21 North, Range 58 East in Richland County, Montana. Richland County and those areas for which this facility is permitted to operate has been designated unclassified/attainment with all ambient air quality standards.

VI. Air Quality Impacts

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

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #4720-00, the Department determined that the impact from this permitting action will be minor.

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	
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: Nelcon, Inc.
P.O. Box 5370
Kalispell, MT 59903

Montana Air Quality Permit (MAQP) number: 4720-00

Preliminary Determination Issued: February 22, 2012

Department Decision Issued: March 9, 2012

Permit Final: March 27, 2012

1. *Legal Description of Site:* The initial location of the portable concrete plant will be Section 28, Township 21 North, Range 58 East, in Richland County, Montana. However, this facility is permitted as a portable source, and therefore may operate at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.
2. *Description of Project:* Nelcon, Inc. (Nelcon) proposes to operate a portable concrete batch plant. The plant would combine aggregate, sand, cement, and cement additives for transfer to mix trucks for delivery of concrete for various uses at various job sites.
3. *Objectives of Project:* To generate profit providing concrete to various locations throughout Montana, including the 'oil boom' generated needs 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 Montana Air Quality 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 BACT analysis, would be included in MAQP #4720-00.
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
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	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

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

Impacts on aquatic life 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 expected) and only minor amounts of water would be used. Since only a minor amount of air emissions would be generated, only minor deposition would occur.

B. Water Quality, Quantity and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and within the operation. However, water use would only cause a minor impact to the water quality, quantity, and distribution in the area, since only relatively small amounts of water would be required, as the facility is expected to run in an intermittent and seasonal nature. Conditions in MAQP #4702-00 would limit the amount of allowable emissions.

C. Geology and Soil Quality, Stability and Moisture

The facility would have limited allowable operation time and limited emissions. Increased vehicle traffic, deposition of pollutants, and use of water to control fugitive dust emissions would be expected. Based on the size and operating nature of the plant, and conditions in MAQP #4720-00, affects upon geology and soil quality, stability, and moisture would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Pollutant deposition can potentially affect vegetation cover, quantity, and quality. MAQP #4720-00 would contain conditions which would limit the allowable emissions from the facility. However, operations are expected to be intermittent and seasonal. Minor impacts to vegetation cover, quantity, and quality would be expected.

E. Aesthetics

The equipment would be visible and would create additional noise in the area of operation. However, MAQP #4720-00 would include conditions to control visible emissions from the plant. The facility is also expected to operate on an intermittent basis. Minor impacts to aesthetics would be expected.

F. Air Quality

MAQP #4720-00 would contain conditions limiting the allowable emissions from the facility. The amount of allowable emissions generated from the plant is below those levels which the Department would require more rigorous air quality impact analyses be conducted. Based on the amount of allowable emissions that would be expected from the plant, only minor impacts would be expected.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program requesting any available information regarding Montana Species of Special Concern in the vicinity of the initial location of the plant, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources. The request was returned with 19 species occurrence reports for 13 animal species of concern and 1 ecological site report.

Species of concern located in the vicinity of the area include the Great Blue Heron, the Whooping Crane, the Least Tern, the Veery, the Pallid Sturgeon, the Paddlefish, the Shortnose Gar, the Sturgeon Chub, the Sicklefin Chub, the Blue Sucker, the Sauger, the Hoary Bat, the Meadow Jumping Mouse, and the Spiny Softshell.

As discussed in the above sections, impacts to water, air, and land are expected to be minor due to the conditions and limitations which would be placed in the MAQP. Based on information submitted by the applicant for the application of an air quality permit, the initial location of the equipment will be in an area already previously disturbed by agricultural activities. Effects to these species as a direct result of the installation and operation of the equipment, given the limited amount of allowable emissions and operating time permissible, would be expected to be minor.

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

Water would be required for dust suppression of particulate emissions. Impacts to air resources would be expected as operations of the plant would create air emissions. Energy requirements would be present as the diesel generator engine required to create electrical power for the plant would require fuel. Based on the size of the operation, the conditions and limitations which would be placed in the MAQP, and the intermittent nature of the operations expected, impacts to water, air, and energy resources 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 proposed initial location of the facility.

The file search returned the presence of 3 files. A historic irrigation system, a historic energy development (pipeline), and a historic railroad. The Montana Historical Society notes that as long as there will be no disturbance or alteration to structures over fifty years of age, there is a low likelihood cultural properties would be impacted. The Department determined that installation and operation of this equipment as a result of issuance of MAQP 4720-00 would not be expected to alter or change any structures over fifty years of age.

J. Cumulative and Secondary Impacts

The batch concrete plant operations would cause minor cumulative and secondary impacts to the physical and biological environment in the immediate area. The plant would generate emissions, and have minor effects to air, water, and land. The Department expects this plant to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4720-00.

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			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	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 operation of the batch concrete plant would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of operation because the plant would be relatively small and would operate intermittently. Employment of approximately 15 people would be expected. Therefore, only minor impacts to any existing social structures and mores or cultural uniqueness and diversity would be expected as a result of this permitting action.

C. Local and State Tax Base and Tax Revenue

The batch concrete plant operations itself would have little impact on the local and state tax base and tax revenue because the plant would likely be a temporary source, and operate intermittently. It would not be expected that this plant would remain at the proposed initial site for an extended period of time.

D. Agricultural or Industrial Production

The batch concrete plant operations would initially be located in an area which is predominately agricultural. As discussed in Section 7.D, effects to vegetation cover, quantity, and quality, would be expected to be minor. With the size, nature of operations, and conditions which would be placed in MAQP #4720-00, installation and operation of the batch concrete plant itself would have minor impacts to agricultural or industrial production in the area.

E. Human Health

MAQP #4720-00 would incorporate conditions to ensure that the concrete batch plant operations would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Since these conditions would be incorporated, only minor impacts would be expected from this batch concrete plant.

F. Access to and Quality of Recreational and Wilderness Activities

Effects on the quality of recreational activities may be created by noise from the site as some recreational activity may occur on relatively nearby lands. Given the intermittent and likely temporary nature of the plant, and the distance to nearby recreational sites, no more than a minor impact to the quality of recreational and wilderness activities would be expected. Any impacts to access of recreational or wilderness activities would be expected to be minor.

G. Quantity and Distribution of Employment

H. Distribution of Population

The employment of approximately 15 people would be expected as a result of the issuance of MAQP #4720-00. Operations would be expected to be intermittent, seasonal, and temporary. No more than minor effects to the quantity and distribution of employment or distribution of population would be expected.

I. Demands for Government Services

Demands for government services would be minor as the source is a relatively small source by industrial standards.

J. Industrial and Commercial Activity

A small increase in traffic associated with the materials and equipment needed to support making the cement and shipment of cement would be expected. Impacts would be expected to be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. MAQP #4720-00 would be issued in accordance with rules designed to protect human health and the environment.

L. Cumulative and Secondary Impacts

Consideration of the individual economic and social effects were determined to be minor. Cumulative and secondary impacts would be expected to be minor.

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

The current permitting action is for the construction and operation of a portable concrete batch plant. MAQP #4720-00 would include 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

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