Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

February 8, 2011

Sam Weyers
Nelcon, Inc.
P.O. Box 5370
Kalispell, Montana 59903

Dear Mr. Weyers:

Montana Air Quality Permit #3871-01 is deemed final as of February 8, 2011, by the Department of Environmental Quality (Department). This permit is for a portable wash plant and cement guppy with associated equipment. 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

Ed Warner
Environmental Engineer
Air Resources Management Bureau
(406) 444-2467

VW:EW
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3871-01

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

February 8, 2011

MONTANA AIR QUALITY PERMIT

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

Montana Air Quality Permit: #3871-01
Administrative Amendment (AA) Request
Received: 5/21/09 and 3/3/10
Department's Decision on AA: 1/21/11
Permit Final: 2/8/11
AFS #: 777-3871

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. Plant Location

Nelcon operates a portable wash plant and cement guppy with associated equipment at various locations throughout Montana. The homepit location is in the SE¼ of Section 35 and SW¼ of Section 36, Township 30 North, Range 21 West in Flathead County, Montana. MAQP #3871-01 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

Addendum #2 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 (PM_{10}) nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31), including the homepit location: Sections 35 and 36, Township 30 North, Range 21 West, in Flathead County, Montana.

B. Current Permit Action

On March 3, 2010, the Department received a partial application from Nelcon to incorporate the cement guppy and associated equipment into the MAQP. The equipment associated with this request is:

- Cement guppy – rated transfer capacity is 25 tons per hour (TPH).
- Cement guppy transfer diesel engine rated at 100-bhp and certified to Environmental Protection Agency (EPA) non-road diesel engine Tier 2 emission standards.
- Cement trailer –rated transfer capacity is 25 TPH.
- Portable cement silo – rated transfer capacity is 105 to 111 TPH.
- Silo transfer diesel engine rated at 27-brake horsepower (bhp) and certified to EPA non-road diesel engine Tier 1 emission standards.

The Department determined that the equipment could be incorporated into the MAQP as a de minimis change as long as any replacement diesel engine associated with the guppy and associated equipment would not exceed the current maximum design horsepower ratings and that those replacement engines met or exceeded the same EPA emissions standards. Nelcon agreed to this stipulation and on May 13, 2010, provided the Department with electronic correspondence stating their acknowledgment. On May 18, 2010, the Department sent a letter

to Nelcon approving this de minimis request because the potential emissions did not exceed the de minimis threshold as stated in ARM 17.8.745(1)(a) which at that time was 15 tons per year. The current de minimis threshold stated in ARM 17.8.745(1)(a) of five tons per year took effect on May 28, 2010, after this change was approved.

The current permitting action is an administrative amendment to incorporate the cement guppy and associated equipment into the MAQP in accordance with ARM 17.8.764(1)(b). The size rating of the 150-kW generator engine has also been determined to be no more than 288-bhp and the permit conditions and potential emissions calculations related to it have been updated to reflect 288-bhp. The MAQP is also updated to reflect current language and rule references used by the Department.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

    - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

    - For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

    - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

    - For equipment that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity

3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

4. Nelcon shall not cause or authorize to be discharged into the atmosphere from any street, road or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).

5. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, II.A.3, and II.A.4 (ARM 17.8.752).

6. Wash plant production is limited to 876,000 tons during any rolling 12-month time period (ARM 17.8.749).

7. Nelcon shall not operate more than one diesel generator engine at any given time and the maximum-rated design capacity of the generator engine shall not exceed 288-bhp (ARM 17.8.749).

8. The cement guppy transfer diesel engine shall not exceed a maximum rated design capacity of 100-bhp and it shall be certified to EPA non-road Tier 2 or better emission standards (ARM 17.8.749).

9. The silo transfer diesel engine shall not exceed a maximum rated design capacity of 27-bhp and it shall be certified to EPA non-road Tier 1 or better emission standards (ARM 17.8.749).

10. 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).

11. 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).

12. 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* 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, Subpart A and Subpart OOO). Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this equipment 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 17.8.765).

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. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. 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).

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

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. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, 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 # 3871-01

I. Introduction/Process Description

A. Permitted Equipment

Nelcon, Inc. (Nelcon) owns and operates a portable wash plant, cement guppy, and associated equipment consisting of the following:

- Trap feeder (up to 700 tons per hour (TPH))
- Wash plant (100 TPH)
- 288-brake horsepower (bhp) diesel generator engine
- Cement guppy – rated transfer capacity is 25TPH,
- Cement guppy transfer diesel rated at 100-bhp and certified to Environmental Protection Agency (EPA) non-road diesel engine Tier 2 emission standards.
- Cement trailer – rated transfer capacity is 25 TPH.
- Portable cement silo – rated transfer capacity is 105 to 111 TPH.
- Silo transfer diesel engine rated at 27-bhp and certified to EPA non-road diesel engine Tier 1 emission standards.
- Other associated equipment

B. Source Description

Nelcon uses this wash plant and associated equipment to wash aggregate for use in various construction operations. For a typical operation setup, materials are loaded into the feeder, conveyed to the wash plant, separated and conveyed to stockpile for sale and use in construction operations.

For the cement guppy, cement is delivered to Nelcon by a cement supplier and transferred to the guppy which is used for bulk storage. The cement powder is transferred from the delivery truck to the guppy with air. The transfer process is a closed system, with the surplus air discharging through a water bath to clean residual cement powder from the air. The front of the guppy has a 100-bhp diesel engine on it that produces compressed air to transfer the cement powder from the guppy to the trailer. Transfer of cement from the guppy to the trailer uses the same closed wet wash system. The front of the cement trailer has a compressor on it to produce air to transfer the cement from the trailer to the portable cement silo. This compressor is driven by the hydraulics on the truck pulling it. The portable cement silo has a bag house mounted on the front of the trailer to recover the cement dust from the powder transfer to the silo. The portable cement silo then uses an auger driven by a 27-bhp diesel engine to transfer to a concrete truck, with a soft discharge line running from the end of the auger down into the cement storage tank on the Cementek Mobile Mixer.

C. Permit History

On July 26, 2006, the Montana Department of Environmental Quality (Department) received an MAQP application from Nelcon for a portable wash plant consisting of a trap feeder with a 700 TPH maximum capacity, a wash plant with a 100 TPH maximum capacity, and a 150-kilowatt (kW) diesel generator. This facility would operate in or within 10 kilometers (km) of particulate matter with an aerodynamic diameter of 10 microns or

less (PM_{10}) nonattainment areas. **MAQP #3871-00** and **Addendum #1** were issued final on October 11, 2006.

D. Current Permit Action

On May 21, 2009, the Department received a de minimis determination request from Nelcon to incorporate a cement guppy and associated equipment into MAQP #3871-00. On March 3, 2010, Nelcon submitted additional information that described the guppy and associated equipment as follows:

- Cement guppy – rated transfer capacity is 25 TPH.
- Cement guppy transfer diesel engine rated at 100-bhp and certified to EPA non-road diesel engine Tier 2 emission standards.
- Cement trailer –rated transfer capacity is 25 TPH.
- Portable cement silo – rated transfer capacity is 105 to 111 TPH.
- Silo transfer diesel engine rated at 27-bhp and certified to EPA non-road diesel engine Tier 1 emission standards.

The Department determined that the equipment could be incorporated into the MAQP as a de minimis change as long as any replacement diesel engine associated with the guppy and associated equipment would not exceed the current maximum design horsepower ratings and that those replacement engines met or exceeded the same EPA emissions standards. Nelcon agreed to this stipulation and on May 13, 2010, provided the Department with electronic correspondence stating their acknowledgment. On May 18, 2010, the Department sent a letter to Nelcon approving this de minimis request because the potential emissions did not exceed the de minimis threshold as stated in Administrative Rules of Montana (ARM) 17.8.745(1)(a) which at that time was 15 tons per year. The current de minimis threshold stated in ARM 17.8.745(1)(a) of five tons per year took effect on May 28, 2010, after this change was approved.

The current permitting action is an administrative amendment to incorporate the cement guppy and associated equipment into the MAQP and addendum in accordance with ARM 17.8.764(1)(b). The size rating of the 150-kW generator engine has also been determined to be no more than 288-bhp and the permit conditions and potential emissions calculations related to it have been updated to reflect 288-bhp. The MAQP and addendum are also updated to reflect current language and rule references used by the Department. **MAQP #3871-01** replaces MAQP #3871-00 and **Addendum #2** replaces Addendum #1.

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 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
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

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 reasonable precautions must 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 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 Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR Part 60. However, because this MAQP is written in a de minimis-friendly manner, the following NSPS may become applicable in the future.

   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 plant to be subject to this subpart, the facility must meet the definition of an affected facility, the plant must have above-ground crushers, and the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Nelcon, the portable wash plant is not currently subject to this subpart because it is a wet material processing operation. This subpart could become applicable if a crushing unit with a capacity of greater than 150 TPH were added to the MAQP or was used in conjunction with this MAQP, possibly from another permitted source.

   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 in MAQP #3871-02 is not currently subject to this subpart because they were manufactured prior to the applicable dates or they do not meet the definition of a stationary CI ICE. However, this subpart could become applicable if a non-road CI ICE were operated in the same location for 12 months or more and was manufactured, modified, or reconstructed after the applicable dates as described in the 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 potentially a NESHAP-affected facility under 40 CFR Part 63 and 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 is a source of HAP emissions that that is not a major source. Based on the information submitted by Nelcon, the RICE equipment to be used under MAQP #3871-01 is potentially subject to this subpart because it may meet the definition of a stationary RICE at an area source of HAP if operated in the same location for 12 months or more.

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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

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 particulate matter (PM) and oxides of nitrogen (NO_x); 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. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

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 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 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 TPY of any pollutant,

b. PTE > 10 TPY of any one HAP, PTE > 25 TPY of a combination of all HAP, or lesser quantity as the Department may establish by rule, or

c. PTE > 70 TPY of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3871-00 for Nelcon, the following conclusions were made:

   a. The facility's PTE is less than 100 TPY for any pollutant.

   b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY of all HAP.

   c. This source is not located in a serious PM_{10} nonattainment area. The home pit location is within the 10 km buffer zone of the Columbia Falls, Kalispell, and Whitefish PM_{10} nonattainment areas; however, these PM_{10} nonattainment areas are not classified as serious nonattainment areas by EPA.

   d. This facility is potentially subject to current NSPS. 40 CFR 60, Subpart A – General Provisions, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants, and Subpart IIII – Standards of Performance for Stationary CI ICE could be applicable to this facility.

   e. This facility is potentially subject to a current NESHAP. 40 CFR 63, Subpart A – General Provisions and Subpart ZZZZ – National Emissions Standards for HAP for Stationary RICE are applicable to any stationary RICE at the facility.

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

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

   Based on these facts, the Department has determined that Nelcon will be a minor source of emissions as defined under Title V.

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.

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

Source	**TPY**					
	PM	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Truck Unloading (700 TPH)	0.05	0.05				
Material Transfer (700 TPH)	0.86	0.28				
Pile Forming	0	0				
Wash plant (100 TPH)	4.14	1.97				
Diesel Generator (288-bhp)	2.78	2.78	39.10	3.17	8.43	2.59
Haul Roads	12.68	3.6				
Guppy Transfer	0.11	0.04				

Source	TPY					
	PM	PM_{10}	NO_x	VOC	CO	SO_x
Silo Transfer	0.48	0.17				
100-bhp diesel engine guppy transfer	0.21	0.21	4.72	1.10	3.57	0.90
29-bhp diesel engine silo transfer	0.17	0.17	1.98	0.32	1.15	0.26
Total	**21.48**	**9.27**	**45.8**	**4.59**	**13.15**	**3.75**

Material Transfer – SCC 3-05-020-06, controlled
Truck Unloading (1)
Maximum Process Rate: 700 ton/hr
Adjusted Process Rate: 700 ton/hr
Number of Material Transfer: 1 Load
Hours of Operation: 8760 hr/day or 24.00 hr/day

PM Emissions:

Emission Factor: 0.000016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.000016 lb/ton * 700 ton/hr * 1 Load = 0.01 lb/hr
Daily Calculations: 0.0112 lb/hr * 24 hr/day = 0.27 lb/day
Annual Calculations: 0.0112 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.05 TPY

PM-10 Emissions:

Emission Factor: 0.000016 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.000016 lb/ton * 700 ton/hr * 1 Load = 0.01 lb/hr
Daily Calculations: 0.0112 lb/hr * 24 hr/day = 0.27 lb/day
Annual Calculations: 0.0112 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.05 TPY

Material Transfer (2 Material Transfer, 700 TPH)
Maximum Process Rate: 700 ton/hr
Adjusted Process Rate: 700 ton/hr
Number of Material Transfer: 2 number of Transfers
Hours of Operation: 8760 hr/day 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 * 700 ton/hr * 2 number of Transfers = 0.20 lb/hr
Daily Calculations: 0.196 lb/hr * 24 hr/day = 4.70 lb/day
Annual Calculations: 0.196 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.86 TPY

PM-10 Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Section 11.19.2-2, 8/04)
Hourly Calculations: 0.000046 lb/ton * 700 ton/hr * 2 number of Transfers = 0.06 lb/hr
Daily Calculations: 0.0644 lb/hr * 24 hr/day = 1.55 lb/day
Annual Calculations: 0.0644 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.28 TPY

Wash Plant (up to 100 TPH)
Maximum Process Rate: 100 ton/hr
Adjusted Process Rate: 100 ton/hr
Hours of Operation: 8760 hr/day or 24.00 hr/day

PM Emissions:

Emission Factor: 0.0315 lb/ton (AP-42, Section 11.19.2-2, 1/95)
Control Efficiency: 70% wet material
Hourly Calculations: 0.0315 lb/ton * 100 ton/hr * (1-0.7) = 0.95 lb/hr
Daily Calculations: 0.945 lb/hr * 24 hr/day = 22.68 lb/day
Annual Calculations: 0.945 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 4.14 TPY

PM-10 Emissions:

Emission Factor: 0.015 lb/ton (AP-42, Section 11.19.2-2, 1/95)
Control Efficiency 70% wet material
Hourly Calculations: 0.015 lb/ton * 100 ton/hr * (1-0.7) = 0.45 lb/hr
Daily Calculations: 0.45 lb/hr * 24 hr/day = 10.80 lb/day
Annual Calculations: 0.45 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.97 TPY

Engine Generator (up to 288-bhp)

Generator Size 150 kW
Assumed Engine Size 288-bhp Based on Department research of 150-kW Stamford Gensets

Hours of Operation: 8760 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: 288 hp * 0.0022 lb/hp-hr = 0.634 lb/hr
Daily Calculations: 288 hp * 0.0022 lb/hp-hr * 24 hr/day = 15.21 lb/day
Annual Calculations: 288 hp * 0.0022 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 2.78 TPY

PM-10 Emissions:

Emission Factor: 0.0022 lb/hp -hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 288 hp * 0.0022 lb/hp-hr = 0.6336 lb/hr
Daily Calculations: 288 hp * 0.0022 lb/hp-hr * 24 hr/day = 15.21 lb/day
Annual Calculations: 288 hp * 0.0022 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 2.78 TPY

NO_X Emissions:

Emission Factor: 0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 288 hp * 0.031 lb/hp-hr = 8.928 lb/hr
Daily Calculations: 288 hp * 0.031 lb/hp-hr * 24 hr/day = 214.27 lb/day
Annual Calculations: 288 hp * 0.031 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 39.10 TPY

VOC Emissions:

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 288 hp * 0.00247 lb/hp-hr = 0.711 lb/hr
Daily Calculations: 288 hp * 0.00247 lb/hp-hr * 24 hr/day = 17.07 lb/day
Annual Calculations: 288 hp * 0.00247 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 3.17 TPY

CO Emissions:

Emission Factor: 0.00668 lb/ton (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 288 hp * 0.00668 lb/hp-hr = 1.924 lb/hr
Daily Calculations: 288 hp * 0.00668 lb/hp-hr * 24 hr/day = 46.17 lb/day
Annual Calculations: 288 hp * 0.00668 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 8.43 TPY

SO_X Emissions:

Emission Factor: 0.00205 lb/ton (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 288 hp * 0.00205 lb/hp-hr = 0.590 lb/hr
Daily Calculations: 288 hp * 0.00205 lb/hp-hr * 24 hr/day = 14.17 lb/day
Annual Calculations: 288 hp * 0.00205 lb/hp-hr * 8760 hr/yr * 0.0005 ton/lb = 2.59 TPY

Haul Roads

Vehicle miles traveled: 5 VMT/day (Estimated)
Control Efficiency is included in Emission Factor

PM Emissions:
PM Emission Factor (Rated Load Capacity <50 tons): 13.90 lb/VMT

E(PM) = (%VMT/day)(13.90 lb/VMT)
E(PM) = 69.50 lbs/day
12.68 TPY

PM10 Emissions:

PM Emission Factor (Rated Load Capacity <50 tons): 3.95 lb/VMT

E(PM) = (%VMT/day)(13.90 lb/VMT)
E(PM) = 19.75 lbs/day
3.60 TPY

Guppy Transfer

Flow Capacity = 25 tph
Maximum Hours of Operation = 8,760 hrs/yr

Filterable PM Emissions:
Emission Factor = 0.00099 lb/ton (AP-42 11.12-2, Controlled Cement unloading, 6/06)
Calculation: (25 tph) * (8760 hrs/yr) * (0.00099 lb/ton) * (ton/2000 lb) = 0.11 ton/yr

Filterable PM_{10} Emissions:
Emission Factor = 0.00034 lb/ton (AP-42 11.12-2, Controlled Cement unloading, 6/06)
Calculation: (25 tph) * (8760 hrs/yr) * (0.00034 lb/ton) * (ton/2000 lb) = 0.04 ton/yr

Filterable $PM_{2.5}$ Emissions:
Emission Factor = 0.0001485 lb/ton (Assume PM2.5 = 15% of PM, AP-42, Appendix B-2, Category 3)
Calculation: (25 tph) * (8760 hrs/yr) * (0.0001485 lb/ton) * (ton/2000 lb) = 0.02 ton/yr

Silo Transfer

Flow Capacity = 111 tph
Maximum Hours of Operation = 8,760 hrs/yr

Filterable PM Emissions:
Emission Factor = 0.00099 lb/ton (AP-42 11.12-2, Controlled Cement unloading, 6/06)
Calculation: (111 tph) * (8760 hrs/yr) * (0.00099 lb/ton) * (ton/2000 lb) = 0.48 ton/yr

Filterable PM_{10} Emissions:
Emission Factor = 0.00034 lb/ton (AP-42 11.12-2, Controlled Cement unloading, 6/06)
Calculation: (111 tph) * (8760 hrs/yr) * (0.00034 lb/ton) * (ton/2000 lb) = 0.17 ton/yr

Filterable $PM_{2.5}$ Emissions:
Emission Factor = 0.0001485 lb/ton (Assume PM2.5 = 15% of PM, AP-42, Appendix B-2, Category 3)
Calculation: (111 tph) * (8760 hrs/yr) * (0.0001485 lb/ton) * (ton/2000 lb) = 0.07 ton/yr

Diesel Engine Guppy Transfer
Note: Emissions are based on the power output of the engine (100 hp).
Operational Capacity of Engine = 100 hp (EPA Tier 2 Certified)
Hours of Operation = 8,760.00 hours

Total PM/PM_{10}/$PM_{2.5}$ Emissions:
Emission Factor = 0.22 g/hp-hr (All PM < 1 mm, EPA Tier 2 Standard)
Calculation: (8,760 hours) * (100 hp) * (0.22 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 0.21 ton/yr

NOx Emissions:
Emission Factor = 4.9 g/hp-hr (EPA Tier 2 Standard)
Calculation: (8,760 hours) * (100 hp) * (4.9 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 4.72 ton/yr

CO Emissions:
Emission Factor = 3.7 g/hp-hr (EPA Tier 2 Standard)
Calculation: (8,760 hours) * (100 hp) * (3.7 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 3.57 ton/yr

VOC Emissions:
Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
Calculation: (8,760 hours) * (100 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 1.10 ton/yr

SOx Emissions:
Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (100 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 0.898 ton/yr

Diesel Engine Silo Transfer
Note: Emissions are based on the power output of the engine (29 hp).
Operational Capacity of Engine = 29 hp (EPA Tier 1 Certified)
Hours of Operation = 8,760.00 hours

Total $PM/PM_{10}/PM_{2.5}$ Emissions:
Emission Factor = 0.6 g/hp-hr (All PM < 1 μm, EPA Tier 1 Standard)
Calculation: (8,760 hours) * (29 hp) * (0.6 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 0.17 ton/yr

NOx Emissions:
Emission Factor = 7.1 g/hp-hr (EPA Tier 1 Standard)
Calculation: (8,760 hours) * (29 hp) * (7.1 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 1.98 ton/yr

CO Emissions:
Emission Factor = 4.1 g/hp-hr (EPA Tier 1 Standard)
Calculation: (8,760 hours) * (29 hp) * (4.1 g/hp-hr) * (0.0022 lb/g) * (ton/2000 lb) = 1.15 ton/yr

VOC Emissions:
Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
Calculation: (8,760 hours) * (29 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 0.32 ton/yr

SOx Emissions:
Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (29 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 0.26 ton/yr

V. Existing Air Quality

On July 1, 1987, the EPA promulgated new National Ambient Air Quality Standards (NAAQS) for PM_{10}. Due to exceedances of the NAAQS for PM_{10}, 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 PM_{10}. As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM_{10} 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 determined these sources to be the major contributors to PM_{10} emissions.

MAQP #3871-01 applies while operating at any location in Montana designated as attainment or unclassified for all NAAQS; except those areas having a Department approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. Addendum #2 applies for locations in or within 10 km of certain PM_{10} nonattainment areas.

VI. Air Quality Impacts

MAQP #3871-01 is issued for a portable wash plant and cement guppy with associated equipment to operate at various locations throughout Montana. This facility would be allowed to operate in areas designated as attainment or unclassified for all NAAQS; excluding those counties that have a Department approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

Addendum #2 applies to the Nelcon wash plant and cement guppy with associated equipment while operating at any location in or within 10 km of PM_{10} nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31), including the home pit location: SE¼ of Section 35 and SW¼ of Section 36, Township 30 North, Range 21 West, in Flathead County, Montana.

VI. 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.

VII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility in excess of the de minimis threshold and is thus considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared By: Ed Warner
Date: 12/14/10

Addendum #2
Nelcon, Inc.
Montana Air Quality Permit (MAQP) #3871-01

An addendum to MAQP #3871-01 is issued to Nelcon, Inc. (Nelcon), pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

Nelcon owns and operates a portable wash plant consisting of a trap feeder (700 tons per hour (TPH)), wash plant (100 TPH), conveyors, and a 288-brake horsepower (bhp) diesel generator engine; and a cement guppy with associated equipment that consists of a 100-bhp guppy transfer diesel engine certified to Environmental Protection Agency (EPA) non-road diesel engine Tier 2 emission standards, a cement trailer, portable cement silo, and a 27-bhp silo transfer diesel engine certified to EPA non-road diesel engine Tier 1 emission standards. A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

II. Seasonal and Site Restrictions – **Winter and Summer Seasons**

Addendum #2 applies to the Nelcon wash plant and cement guppy and associated equipment while operating at any location in or within kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

A. During the winter season (October 1-March 31), the only location(s) in or within 10 km of certain PM_{10} nonattainment areas where Nelcon may operate is:

- Sections 35 and 36, Township 30 North, Range 21 West (304 Jellison Road); and
- Any other site that may be approved, in writing, by the Department.

B. During the summer season (April 1-September 30), Nelcon may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM_{10} nonattainment areas.

C. Nelcon shall comply with the limitations and conditions contained in Addendum #2 to MAQP #3871-01. Addendum #2 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #2 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

1. Water spray bars must be operated when necessary on all transfer points whenever the plant is operating (ARM 17.8.749).

2. Nelcon shall not cause or authorize to be discharged into the atmosphere from any equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749). For New Source Performance Standards (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 (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

3. Nelcon shall not cause or authorize to be discharged into the atmosphere from equipment, such as transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over six consecutive minutes (ARM 17.8.749).

4. 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 averaged over six consecutive minutes (ARM 17.8.749).

5. Nelcon shall treat all unpaved portions of the haul roads, 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).

6. Wash plant production is limited to 2400 tons per day (ARM 17.8.749).

7. Nelcon shall not operate more than one diesel generator engine at any given time and the maximum rated design capacity of the engine shall not exceed 288-bhp (ARM 17.8.749).

8. The cement guppy transfer diesel engine shall not exceed a maximum rated design capacity of 100-bhp and it shall be certified to EPA non-road Tier 2 or better emission standards (ARM 17.8.749).

9. The silo transfer diesel engine shall not exceed a maximum rated design capacity of 27-bhp and it shall be certified to EPA non-road Tier 1 emission standards (ARM 17.8.749).

B. Operational Reporting Requirements

1. If this equipment 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 submitted to the Department with the annual emission inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):

   a. Tons of bulk material loaded at each site (production);

   b. Daily hours of operation at each site;

   c. Daily hours of operation and the hp for each engine at each;

   d. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

3. Nelcon shall document, by day, the total wash plant production. Nelcon shall sum the total wash plant production for the previous day to verify compliance with the limitation in Section III.A.6 (ARM 17.8.749).

Addendum #2 Analysis
Nelcon, Inc.
Montana Air Quality Permit (MAQP) #3871-01

I. Permitted Equipment

Nelcon, Inc. (Nelcon) will operate a portable wash plant and cement guppy with associated equipment at various locations throughout Montana. This MAQP allows Nelcon to operate a trap feeder (700 tons/hour (TPH)), wash plant (100 TPH), conveyors, a 288-brake horsepower (bhp) diesel generator engine; and a cement guppy with associated equipment that consists of a 100-bhp guppy transfer diesel engine certified to Environmental Protection Agency (EPA) non-road diesel engine Tier 2 emission standards, a cement trailer, portable cement silo, and a 27-bhp silo transfer diesel engine certified to EPA non-road diesel engine Tier 1 emission standards. A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

Addendum #2 applies to the Nelcon wash plant while operating at any location in or within 10 kilometers (km) of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31), including the initial site location: Sections 35 and 36, Township 30 North, Range 21 West, in Flathead County, Montana.

II. Source Description

Nelcon proposes to use this wash plant and associated equipment to wash aggregate for use in various construction operations. For a typical operation setup, materials are loaded into the feeder, conveyed to the wash plant, separated and conveyed to a stockpile for sale and use in construction operations.

For the cement guppy, cement is delivered to Nelcon by a cement supplier and transferred to the guppy which is used for bulk storage. The cement powder is transferred from the delivery truck to the guppy with air. The transfer process is a closed system, with the surplus air discharging through a water bath to clean residual cement powder from the air. The front of the guppy has a 100-bhp diesel engine on it that produces compressed air to transfer the cement powder from the guppy to the trailer. Transfer of cement from the guppy to the trailer uses the same closed wet wash system. The front of the cement trailer has a compressor on it to produce air to transfer the cement from the trailer to the portable cement silo. This compressor is driven by the hydraulics on the truck pulling it. The portable cement silo has a bag house mounted on the front of the trailer to recover the cement dust from the powder transfer to the silo. The portable cement silo then uses an auger driven by a 27-bhp diesel engine to transfer to a concrete truck, with a soft discharge line running from the end of the auger down into the cement storage tank on the Cementek Mobile Mixer.

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 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 source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Nelcon demonstrated compliance with all applicable rules and standards as required for permit issuance.

B. ARM 17.8.764 Modification of Permit. An air quality permit may be modified 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 which do not result in an increase in emissions because of the 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.

Nelcon must submit proof of compliance with the transfer and public notice requirements when Nelcon transfers to any of the locations covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and limitations in Addendum #2 to MAQP #3871-01 will prevent Nelcon from having a significant impact on PM_{10} nonattainment areas.

IV. Emission Inventory

Source	**Lb/day**					
	PM	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Truck Unloading (700 TPH)	0.27	0.27				
Material Transfer (700 TPH)	4.70	1.55				
Pile Forming	0	0				
Wash plant (100 TPH)	22.68	10.80				
Diesel Generator * (288-bhp)	15.21	15.21	214.27	17.07	46.17	14.17
Haul Roads	69.5	19.75				
Guppy Transfer	0.59	0.20				
Silo Transfer	2.64	0.91				
100-bhp Diesel Engine Guppy Transfer	1.16	1.16	25.87	6.03	19.54	4.92
27-bhp Diesel Engine Silo Transfer	0.92	0.92	10.87	1.75	6.28	1.43
Total	**117.67**	**50.77**	**251.01**	**24.85**	**71.99**	**20.52**

V. Existing Air Quality

On July 1, 1987, the EPA promulgated new National Ambient Air Quality Standards (NAAQS) for PM_{10}. Due to exceedances of the national standards for PM_{10}, 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 PM_{10}. As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM_{10} 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 determined these sources to be the major contributors to PM_{10} emissions.

MAQP #3871-02 and Addendum #2 are for a portable wash plant and cement guppy with associated equipment that will locate at sites in or within 10 km of certain PM_{10} 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 be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

MAQP #3871-01 and Addendum #2 will cover the operations of this portable wash plant and cement guppy with associated equipment while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum #2 will cover the operations of this portable wash plant and cement guppy with associated equipment while operating at the 304 Jellison Road Pit (Sections 35 and 36, Township 30 North, Range 21 West) during the winter months (October 1 through March 31) which is within 10 km of the Columbia Falls, Kalispell, and Whitefish PM_{10} nonattainment areas. Additionally, the facility will be allowed to operate in or within 10 km of PM_{10} nonattainment areas throughout the state during the summer months (April 1 through September 30).

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 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.

VII. Environmental Assessment

The current permit action is an administrative amendment and does not constitute a state action; therefore, an environmental assessment is not required for the proposed project.

Addendum Analysis Prepared by: Ed Warner
Date: 12/13/10