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May 2, 2013

Sam Weyers
Nelcon, Inc
PO Box 5370
Kalispell, MT 59903

Dear Mr. Weyers:

Montana Air Quality Permit #3871-02 is deemed final as of May 2, 2013, by the Department of Environmental Quality (Department). This permit is for a wash plant and cement guppy. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

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

JM:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3871-02

Nelcon, Inc
PO Box 5370
Kalispell, MT 59903

May 2, 2013



MONTANA AIR QUALITY PERMIT

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

Montana Air Quality Permit: #3871-02
Application Complete: 2/22/2013
Preliminary Determination Issued: 3/29/2013
Department Decision: 4/16/2013
Final Permit: 5/2/2013
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 SE¹/₄ of Section 35 and SW¹/₄ of Section 36, Township 30 North, Range 21 West in Flathead County, Montana. MAQP #3871-02 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality – Air Resources Management Bureau (Department) approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

MAQP #3871-02 and Addendum #3 applies to the Nelcon facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas during the summer season (April 1 – September 30) and at sites approved by the Department during the winter season (October 1 – March 31), including the home pit location: Sections 35 and 36, Township 30 North, Range 21 West, in Flathead County, Montana.

B. Current Permit Action

On February 22, 2013, the Department received a modification application from Nelcon to replace the current generator engine with a larger generator engine, rated for 547 horsepower (hp). The current permit action updates the permit to reflect the new engine, updates hour of operation limitations as necessary to limit emissions, updates the emissions inventory, and updates the permit to reflect the current permit language used by the Department.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any New Source Performance Standards (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
2. 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).
 3. 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).
 4. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
 5. Wash plant production is limited to 876,000 tons during any rolling 12-month time period (ARM 17.8.749).
 6. Nelcon shall not operate or have on-site more than one diesel generator engine at any given time and the maximum-rated design capacity of the generator engine shall not exceed 547 hp (ARM 17.8.749).
 7. The maximum rated 547 hp diesel generator engine shall not exceed 3,900 hours of operation in any rolling 12-month time period (ARM 17.8.749).
 8. The cement guppy transfer diesel engine shall not exceed a maximum rated design capacity of 100 hp 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 hp 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, testing, 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). With the equipment list accounted for in this permit, this equipment operating alone would not be subject to 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: Addendum #3

Nelcon shall comply with all conditions in MAQP #3871-02 and Addendum #3, as applicable, when operating in approved locations in or within 10 km of PM₁₀ nonattainment areas. When operating in an approved PM₁₀ nonattainment area, where the conditions of Addendum #3 are applicable and more stringent, the conditions of Addendum #3 apply (ARM 17.8.749).

SECTION IV: General Conditions

- A. Inspection – Nelcon shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Nelcon fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Nelcon of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. 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.

Addendum #3
Nelcon, Inc.
Montana Air Quality Permit #3871-02

An addendum to Montana Air Quality Permit (MAQP) #3871-02 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, cement guppy, and associated equipment consisting of the following:

- Trap feeder (up to 700 tons per hour (TPH))
- Wash plant (100 TPH)
- 547 horsepower (hp) diesel generator engine
- Cement guppy – rated transfer capacity is 25TPH,
- Cement guppy transfer diesel engine rated at 100-hp 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-hp and certified to EPA non-road diesel engine Tier 1 emission standards
- Other associated equipment

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

Addendum #3 applies to the Nelcon wash plant and cement guppy and associated equipment while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1 – March 31), the only location(s) in or within 10 km of certain PM₁₀ nonattainment areas where Nelcon may operate is:
1. Sections 35 and 36, Township 30 North, Range 21 West (304 Jellison Road); and
 2. Any other site that may be approved, in writing, by the Department of Environmental Quality – Air Resources Management Bureau (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 PM₁₀ nonattainment areas.
- C. Nelcon shall comply with the limitations and conditions contained in MAQP #3871-02 and Addendum #3 while operating in or within 10 km of any approved PM₁₀ nonattainment areas. Where conditions in the Addendum are more stringent, the conditions of the Addendum shall apply. The Department reserves the authority to modify the Addendum 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 – **All Operations in PM₁₀ Nonattainment Areas**

1. Water must be applied, as 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, including pile forming and transfer points, 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 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).
4. 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).

B. Operational Limitations and Conditions – Operations in PM₁₀ Nonattainment Areas **Additional requirement during the Winter Season (October 1 – March 31)**

1. Nelcon shall limit the total hours of operation of each diesel generator engine to 22 hours per day or less (ARM 17.8.749).
2. Nelcon shall limit total wash plant production to 2,200 ton/day or less (ARM 17.8.749).
3. Nelcon shall limit all material handling operations to 22 hours per day of operation or less (ARM 17.8.749).

C. Operational Reporting Requirements

1. Production information for the sites covered by this addendum must be maintained for 5 years and submitted to the Department upon request. The information must include (ARM 17.8.749):
 - a. Tons of bulk material loaded at each site (production). Nelcon shall document, by day, the total wash plant production. Nelcon shall sum the total wash plant production for the previous day to demonstrate compliance with the daily throughput limitation;
 - b. Daily hours of operation at each site;
 - c. Daily hours of operation and the horsepower rating for each engine;
 - d. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

Montana Air Quality Permit (MAQP) Analysis
Nelcon, Inc.
MAQP #3871-02

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)
- 547 horsepower (hp) diesel generator engine
- Cement guppy – rated transfer capacity is 25TPH
- Cement guppy transfer diesel engine rated at 100-hp 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-hp 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-hp 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-hp 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 – Air Resources Management Bureau (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 (PM₁₀) nonattainment areas. **MAQP #3871-00** and **Addendum #1** were issued final on October 11, 2006.

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-hp 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-hp 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 hp 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 (TPY). The current de minimis threshold stated in ARM 17.8.745(1)(a) of five TPY took effect on May 28, 2010, after this change was approved.

The permitting action was 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 had also been determined to be no more than 288 hp and the permit conditions and potential emissions calculations related to it were updated to reflect 288 hp. The MAQP and addendum were also updated to reflect current language and rule references used by the Department. **MAQP #3871-01** replaced MAQP #3871-00 and **Addendum #2** replaced Addendum #1

D. Current Permit Action

On February 22, 2013, the Department received a modification application from Nelcon to replace the current 288 hp generator engine with a larger generator engine, rated for 547 hp. The current permit action updates the permit to reflect the new engine, updates hour of operation limitations as necessary to limit emissions, updates the emissions inventory, and updates the permit to reflect the current permit language used by the Department. **MAQP #3871-02 and Addendum #3** replace MAQP #3871-01 and Addendum #2.

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 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 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. The portable wash plant is not subject to this subpart when operated alone because it is a wet material processing operation. This subpart would become applicable if crushing unit(s) with a combined capacity greater than 150 TPH were added to the MAQP (or 10 TPH for pumice crushing) or was used in conjunction with this MAQP, possibly from another permitted source.
 - c. 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 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.
- 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 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. Nelcon submitted the required permit application. (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 received for this permit action.
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. As clarification for how this rule is applied in PM₁₀ nonattainment areas, 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 #3 will prevent Nelcon from having a significant impact on PM₁₀ nonattainment areas for which the source is allowed to operate in.

(2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 TPY of any pollutant,
 - b. PTE > 10 TPY of any one 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 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 Air Quality Permit #3871-02 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 PM₁₀ nonattainment area. The home pit location is within the 10 km buffer zone of the Columbia Falls, Kalispell, and Whitefish PM₁₀ nonattainment areas; however, these PM₁₀ 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 and potentially Subpart IIII – Standards of Performance for Stationary CI ICE could be applicable to this facility. 40 CFR 60 Subpart OOO does not apply to this equipment if operated alone, however, it may apply if combined with other equipment.
 - 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 neither a Title IV affected source nor 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. Diesel Generator Engine

Any new diesel-fired engine would likely be required to comply with federal engine emission limitations including, for example, EPA Tiered emission standards for non-road engines (40 CFR Part 89 or 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). The Department has determined that compliance with any applicable federal standards, with no additional requirements, 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 #3871-02 Potential to Emit in tons per year						
Source	PM	PM ₁₀	PM _{2.5}	NO _x	CO	VOC
Truck Unloading		0.05				
Material Transfer	0.43	0.14	0.04			
Wash Plant	0.96	0.32	0.02			
547 horsepower Diesel Generator Engine	2.35	2.35	2.35	33.07	7.13	2.68
Guppy Transfer	0.11	0.04	0.02			
Silo Transfer	10.59	3.64	1.59			
100 horsepower guppy transfer diesel engine	0.96	0.96	0.96	4.72	3.57	4.72
29 horsepower silo transfer diesel engine	0.28	0.28	0.28	1.98	1.15	1.98
Haul Roads	8.35	2.13	0.21			
TOTAL:	24.03	9.90	5.47	39.77	11.84	9.39

Nelcon, Inc MAQP #3871-02 Winter Nonattainment Area(s) Potential to Emit in lb/day	
Source	PM ₁₀
Truck Unloading	0.25
Material Transfer	0.71
Wash Plant	1.63

Nelcon, Inc MAQP #3871-02 Winter Nonattainment Area(s) Potential to Emit in lb/day	
547 horsepower Diesel Generator Engine	26.47
Guppy Transfer	0.19
Silo Transfer	0.83
100 horsepower guppy transfer diesel engine	4.83
29 horsepower silo transfer diesel engine	33.62
Haul Roads	11.66
TOTAL:	80.19

Truck Unloading

Maximum Process Rate: 700 ton/hr
Hours of Operation: 8760 hr/yr
Nonattainment Summer Daily Hours of Operation: 24 hr/day
Nonattainment Winter Daily Hours of Operation: 22 hr/day

PM₁₀ Emissions

Emissions Factor: 0.000016 lb/ton (AP-42 Table 11.19.2-2, 8/2004)
Calculations: 0.000016lb/ton*700ton/hr= 0.01 lb/hr
0.0112lb/hr*24hr/day= 0.27 lb/day summer
0.0112lb/hr*22hr/day= 0.25 lb/day winter
0.0112lb/hr*8760hr/yr*0.0005 lb/ton = 0.05 ton/yr

Material Transfer

Maximum Process Rate: 700 ton/hr
Hours of Operation: 8,760 hr/yr
Nonattainment Summer Daily Hours of Operation: 24 hr/day
Nonattainment Winter Daily Hours of Operation: 22 hr/day

PM Emissions

Emissions Factor:	0.00014 lb/ton	
Calculations:	0.00014lb/ton*700 ton/hr=	0.10 lb/hr
	0.098lb/hr*24hr/day=	2.35 lb/day summer
	0.098lb/hr*22hr/day=	2.16 lb/day winter
	0.098lb/hr*8760hr/yr*0.0005 ton/lb =	0.43 ton/yr

PM₁₀ Emissions

Emissions Factor:	0.000046 lb/ton	
Calculations:	0.000046lb/ton*700 ton/hr=	0.03 lb/hr
	0.0322lb/hr*24hr/day=	0.77 lb/day summer
	0.0322lb/hr*22hr/day=	0.71 lb/day winter
	0.0322lb/hr*8760hr/yr*0.0005 ton/lb =	0.14 ton/yr

PM_{2.5} Emissions

Emissions Factor:	0.000013 lb/ton	
Calculations:	0.000013lb/ton*700 ton/hr=	0.01 lb/hr
	0.0091lb/hr*24hr/day=	0.22 lb/day summer
	0.0091lb/hr*22hr/day=	0.20 lb/day winter
	0.0091lb/hr*8760hr/yr*0.0005 ton/lb =	0.04 ton/yr

Wash Plant

Maximum Process Rate:	100 ton/hr
Hours of Operation:	8760 hr/yr
Nonattainment Summer Daily Hours of Operation:	24 hr/day
Nonattainment Winter Daily Hours of Operation:	22 hr/day

PM Emissions

Emissions Factor:	0.0022 lb/ton	
Calculations:	0.0022lb/ton*100ton/hr=	0.22 lb/hr
	0.22lb/hr*24hr/day=	5.28 lb/day summer
	0.22lb/hr*22hr/day=	4.84 lb/day winter
	0.22lb/hr*8760hr/yr*0.0005 ton/lb =	0.96 ton/yr

PM₁₀ Emissions

Emissions Factor:	0.00074 lb/ton	
Calculations:	0.00074lb/ton*100ton/hr=	0.07 lb/hr
	0.074lb/hr*24hr/day=	1.78 lb/day summer
	0.074lb/hr*22hr/day=	1.63 lb/day winter
	0.074lb/hr*8760hr/yr*0.0005 ton/lb =	0.32 ton/yr

PM_{2.5} Emissions

Emissions Factor:	0.00005 lb/ton	
Calculations:	0.00005lb/ton*100ton/hr=	0.01 lb/hr
	0.005lb/hr*24hr/day=	0.12 lb/day summer
	0.005lb/hr*22hr/day=	0.11 lb/day winter
	0.005lb/hr*8760hr/yr*0.0005 ton/lb =	0.02 ton/yr

Generator Engine

Maximum Rating:	547 horsepower
Hours of Operation:	3900 hr/yr
Nonattainment Summer Daily Hours of Operation:	24 hr/day
Nonattainment Winter Daily Hours of Operation:	22 hr/day

NO_x Emissions

Emissions Factor:	0.031 lb/hp-hr	
Calculations:	0.031lb/hp-hr*547horsepower=	16.96 lb/hr
	16.957lb/hr*24hr/day=	406.97 lb/day summer
	16.957lb/hr*22hr/day=	373.05 lb/day winter
	16.957lb/hr*3900hr/yr*0.0005 ton/lb =	33.07 ton/yr

CO Emissions

Emissions Factor:	0.00668 lb/hp-hr	
Calculations:	0.00668lb/hp-hr*547horsepower=	3.65 lb/hr
	3.65396lb/hr*24hr/day=	87.70 lb/day summer
	3.65396lb/hr*22hr/day=	80.39 lb/day winter
	3.65396lb/hr*3900hr/yr*0.0005 ton/lb =	7.13 ton/yr

PM Emissions

Emissions Factor:	0.0022 lb/hp-hr	
Calculations:	0.0022lb/hp-hr*547horsepower=	1.20 lb/hr
	1.2034lb/hr*24hr/day=	28.88 lb/day summer
	1.2034lb/hr*22hr/day=	26.47 lb/day winter
	1.2034lb/hr*3900hr/yr*0.0005 ton/lb =	2.35 ton/yr

VOC Emissions

Emissions Factor:	0.002514 lb/hp-hr	
Calculations:	0.0025141lb/hp-hr*547horsepower=	1.38 lb/hr
	1.3752127lb/hr*24hr/day=	33.01 lb/day summer
	1.3752127lb/hr*22hr/day=	30.25 lb/day winter
	1.3752127lb/hr*3900hr/yr*0.0005 ton/lb =	2.68 ton/yr

Guppy Transfer

Flow Capacity:	25 ton/hr
Hours of Operation:	8760 hr/yr
Nonattainment Summer Daily Hours of Operation:	24 hr/day
Nonattainment Winter Daily Hours of Operation:	22 hr/day

PM Emissions

Emissions Factor:	0.00099 lb/ton	(AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations:	0.00099lb/ton*25ton/hr=	0.02 lb/hr
	0.02475lb/hr*24hr/day=	0.59 lb/day
	0.02475lb/hr*22hr/day=	0.54 lb/day
	0.02475lb/hr*8760hr/yr*0.0005 ton/lb =	0.11 ton/yr

PM₁₀ Emissions

Emissions Factor:	0.00034 lb/ton	(AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations:	0.00034lb/ton*25ton/hr=	0.01 lb/hr
	0.0085lb/hr*24hr/day=	0.20 lb/day
	0.0085lb/hr*22hr/day=	0.19 lb/day
	0.0085lb/hr*8760hr/yr*0.0005 ton/lb =	0.04 ton/yr

PM_{2.5} Emissions

Emissions Factor: 0.000149 lb/ton (AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations: 0.0001485lb/ton*25ton/hr= 0.00 lb/hr
0.0037125lb/hr*24hr/day= 0.09 lb/day
0.0037125lb/hr*22hr/day= 0.08 lb/day
0.0037125lb/hr*8760hr/yr*0.0005 ton/lb
= 0.02 ton/yr

Silo Transfer

Flow Capacity: 111 ton/hr
Hours of Operation: 8760 hr/yr
Nonattainment Summer
Daily Hours of Operation: 24 hr/day
Nonattainment Winter
Daily Hours of Operation: 22 hr/day

PM Emissions

Emissions Factor: 0.00099 lb/ton (AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations: 0.00099lb/ton*111ton/hr= 0.11 lb/hr
0.10989lb/hr*24hr/day= 2.64 lb/day
0.10989lb/hr*22hr/day= 2.42 lb/day
0.10989lb/hr*8760hr/yr*0.0005 ton/lb = 10.59 ton/yr

PM₁₀ Emissions

Emissions Factor: 0.00034 lb/ton (AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations: 0.00034lb/ton*111ton/hr= 0.04 lb/hr
0.03774lb/hr*24hr/day= 0.91 lb/day
0.03774lb/hr*22hr/day= 0.83 lb/day
0.03774lb/hr*8760hr/yr*0.0005 ton/lb = 3.64 ton/yr

PM_{2.5} Emissions

Emissions Factor: 0.000149 lb/ton (AP-42 11.12-2, Controlled cement unloading, 6/06)
Calculations: 0.0001485lb/ton*111ton/hr= 0.02 lb/hr
0.0164835lb/hr*24hr/day= 0.40 lb/day
0.0164835lb/hr*22hr/day= 0.36 lb/day
0.0164835lb/hr*8760hr/yr*0.0005 ton/lb
= 1.59 ton/yr

Guppy Transfer Diesel Engine

Maximum Engine Rating: 100 horsepower
Hours of Operation: 8760 hr/yr
Nonattainment Summer
Daily Hours of Operation: 24 hr/day
Nonattainment Winter
Daily Hours of Operation: 22 hr/day

NO_x Emissions

Emissions Factor: 4.9 g/hp-hr (EPA Tier 2 Standard)
Calculations: $4.9\text{g/hp-hr} \times 100\text{horsepower} \times 0.0022\text{ lb/g} = 1.08\text{ lb/hr}$
 $1.078\text{lb/hr} \times 24\text{hr/day} = 25.87\text{ lb/day summer}$
 $1.078\text{lb/hr} \times 22\text{hr/day} = 23.72\text{ lb/day winter}$
 $1.078\text{lb/hr} \times 8760\text{hr/yr} \times 0.0005\text{ ton/lb} = 4.72\text{ ton/yr}$

CO Emissions

Emissions Factor: 3.7 g/hp-hr (EPA Tier 2 Standard)
Calculations: $3.7\text{g/hp-hr} \times 100\text{horsepower} \times 0.0022\text{ lb/g} = 0.81\text{ lb/hr}$
 $0.814\text{lb/hr} \times 24\text{hr/day} = 19.54\text{ lb/day summer}$
 $0.814\text{lb/hr} \times 22\text{hr/day} = 17.91\text{ lb/day winter}$
 $0.814\text{lb/hr} \times 8760\text{hr/yr} \times 0.0005\text{ ton/lb} = 3.57\text{ ton/yr}$

VOC Emissions

Emissions Factor: 4.9 g/hp-hr (EPA Tier 2 Standard)
Calculations: $4.9\text{g/hp-hr} \times 100\text{horsepower} \times 0.0022\text{ lb/g} = 1.08\text{ lb/hr}$
 $1.078\text{lb/hr} \times 24\text{hr/day} = 25.87\text{ lb/day summer}$
 $1.078\text{lb/hr} \times 22\text{hr/day} = 23.72\text{ lb/day winter}$
 $1.078\text{lb/hr} \times 8760\text{hr/yr} \times 0.0005\text{ ton/lb} = 4.72\text{ ton/yr}$

PM Emissions

Emissions Factor: 0.998 g/hp-hr AP-42
Calculations: $0.998\text{g/hp-hr} \times 100\text{horsepower} \times 0.0022\text{ lb/g} = 0.22\text{ lb/hr}$
 $0.21956\text{lb/hr} \times 24\text{hr/day} = 5.27\text{ lb/day summer}$
 $0.21956\text{lb/hr} \times 22\text{hr/day} = 4.83\text{ lb/day winter}$
 $0.21956\text{lb/hr} \times 8760\text{hr/yr} \times 0.0005\text{ ton/lb} = 0.96\text{ ton/yr}$

Silo Transfer Diesel Engine

Maximum Engine Rating: 29 horsepower
Hours of Operation: 8760 hr/yr
Nonattainment Summer
Daily Hours of Operation: 24 hr/day
Nonattainment Winter
Daily Hours of Operation: 22 hr/day

NO_x Emissions

Emissions Factor: 7.1 g/hp-hr
Calculations: 7.1g/hp-hr*29horsepower*0.0022 lb/g = 0.45 lb/hr
0.45298lb/hr*24hr/day= 10.87 lb/day summer
0.45298lb/hr*22hr/day= 239.17 lb/day winter
0.45298lb/hr*8760hr/yr*0.0005 ton/lb = 1.98 ton/yr

CO Emissions

Emissions Factor: 4.1 g/hp-hr
Calculations: 4.1g/hp-hr*29horsepower*0.0022 lb/g = 0.26 lb/hr
0.26158lb/hr*24hr/day= 6.28 lb/day summer
0.26158lb/hr*22hr/day= 138.11 lb/day winter
0.26158lb/hr*8760hr/yr*0.0005 ton/lb = 1.15 ton/yr

VOC Emissions

Emissions Factor: 7.1 g/hp-hr
Calculations: 7.1g/hp-hr*29horsepower*0.0022 lb/g = 0.45 lb/hr
0.45298lb/hr*24hr/day= 10.87 lb/day summer
0.45298lb/hr*22hr/day= 239.17 lb/day winter
0.45298lb/hr*8760hr/yr*0.0005 ton/lb = 1.98 ton/yr

PM Emissions

Emissions Factor: 0.998 g/hp-hr
Calculations: 0.998g/hp-hr*29horsepower*0.0022 lb/g = 0.06 lb/hr
0.0636724lb/hr*24hr/day= 1.53 lb/day summer
0.0636724lb/hr*22hr/day= 33.62 lb/day winter
0.0636724lb/hr*8760hr/yr*0.0005 ton/lb = 0.28 ton/yr

Haul Roads

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

(AP-42 Section 13.2.2, 11/2006)

Vehicle miles traveled: 5 y VMT/day

PM Emissions

k =	4.9
a =	0.7
b =	0.45
s =	4.8
W =	50
E =	9.15 lb/VMT

Calculations

9.15103067798688lb/VMT*5VMT/day = 45.76 lb/day
45.7551533899344lb/day*365 day/yr * 0.0005 ton/lb = 8.35 ton/yr

PM₁₀ Emissions

k =	1.5
a =	0.9
b =	0.45
s =	4.8
W =	50
E =	2.33 lb/VMT

Calculations

2.33226120673191lb/VMT*5VMT/day= 11.66 lb/day
11.6613060336596lb/day*365 day/yr * 0.0005 ton/lb = 2.13 ton/yr

PM_{2.5} Emissions

k =	0.15
a =	0.9
b =	0.45
s =	4.8
W =	50
E =	0.23 lb/VMT

Calculations

$$\begin{aligned} 0.233226120673191\text{lb/VMT} * 5\text{VMT/day} &= 1.166131 \text{ lb/day} \\ 1.16613060336596\text{lb/day} * 365 \text{ day/yr} * 0.0005 \text{ ton/lb} &= 0.21 \text{ ton/yr} \end{aligned}$$

V. Existing Air Quality

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

MAQP #3871-02 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 #3 applies for locations in or within 10 km of certain PM₁₀ nonattainment areas.

VI. Air Quality Impacts

MAQP #3871-02 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 PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

Addendum #3 applies to the Nelcon wash plant and cement guppy with associated equipment while operating at any location in or within 10 km of PM₁₀ nonattainment areas during the summer season (April 1 – September 30) and at sites approved by the Department during the winter season (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.

VII. Taking or Damaging Implication Analysis

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

YES	NO	
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.

VIII. 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.

Montana Air Quality Permit number: 3871-02

Preliminary Determination Issued: 3/29/2013

Department Decision Issued: 4/16/2013

Permit Final: 5/2/2013

1. *Legal Description of Site:* The Nelcon facility would operate at various locations throughout Montana. MAQP #3871-02 applies while operating in areas designated as attainment or unclassified for all NAAQS; excluding those counties that have a Department-approved permitting program, and those areas considered Tribal Lands. Operation in areas in or within 10 km of certain PM₁₀ nonattainment areas are subject to MAQP #3871-02 and additional and/or more stringent conditions of Addendum #3. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* MAQP #3871-02 and Addendum #3 applies to the Nelcon facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas during the summer season (April 1 – September 30) and at sites approved by the Department during the winter season (October 1 – March 31), including the home pit location in Section 36, Township 30 North, Range 21 West, in Flathead County, Montana.
2. *Description of Project:* Nelcon operates a portable wash plant and cement guppy at various locations throughout Montana. The project consists of adding a 547 hp generator engine to MAQP #3871-02 and Addendum #3. The proposed permit action would update the equipment authorized by MAQP #3871-02, allowing the construction and operation of the plant in locations across the state.
3. *Objectives of Project:* The issuance of MAQP #3871-02 and Addendum #3 would allow Nelcon to operate the permitted equipment at various locations throughout Montana, including the home pit location.
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 MAQP 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 #3871-02.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

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

A. Terrestrial and Aquatic Life and Habitats

MAQP #3871-02 would result in a minor increase in allowable emissions from an annual emissions standpoint. No more than a minor impact to terrestrial and aquatic life and habitats would be expected.

B. Water Quality, Quantity and Distribution

MAQP #3871-02 would result in a minor increase in allowable emissions from an annual emissions standpoint. Use of water for control of particulate emissions would continue to be required. No additional water using equipment is being permitted in this action. No more than a minor impact would be expected.

C. Geology and Soil Quality, Stability and Moisture

MAQP #3871-02 would result in a minor increase in allowable emissions from an annual emissions standpoint. Use of water for control of particulate emissions would continue to be required. No additional water using equipment is being permitted in this action. No change in the areas this plant is allowed to operate in is being permitted. No more than a minor impact would be expected.

D. Vegetation Cover, Quantity, and Quality

There are six known plant species of concern within the project area which includes the Section of the home pit area and an additional one-mile buffer surrounding the area. The overall footprint of the facility would not change as a result of this permitting action. The facility would be considered a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for this type of operation. No more than a minor impact would be expected.

E. Aesthetics

The diesel generator engine would be visible and audible during operation. However, the equipment performs the same function using the same technology as the previous equipment operated under the MAQP. MAQP #3871-02 would include conditions which limit visible emissions from the operation. The hours of operation of the diesel generator engine are limited. The generator engine is being added to an operation which already includes the operation of a large diesel generator engine. No more than a minor impact would be expected.

F. Air Quality

MAQP #3871-02 would limit operation hours such that only a minor increase in emissions from an annual emissions standpoint is permitted. Further, these operational limits keep emissions below the thresholds which require more rigorous quantitative analysis. The Department would expect a minor impact.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources, the Department previously contacted the Montana National Heritage Program (MNHP). Search results concluded there are nine known animal and plant species of concern located within the search area. The search area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The MNHP concluded that the threatened bird species of Bald Eagle has had recorded sightings to the south and southeast of the project area. The threatened fish species of Bull Trout and sensitive fish species of Westslope Cutthroat Trout have recorded sightings in the Whitefish and Flathead Rivers located to the west and east of the site location. Sensitive plant species of concern sighted to the northeast of the site are the Latah Tule Pea and Small Yellow Lady's-slipper. Other plant species of concern sighted northeast of the site are the Aloina Moss, Short-styled Thistle, Deer Indian Paintbrush, and Maidenhair Spleenwort.

Given the fact that most of the species of concern would not likely be located within the operational area of the project, any effects on the local populations would be expected to be minimal. The current permit action adds a small generator engine to an existing operation. No more than a minor impact would be expected.

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

The addition of a 547 hp generator engine would increase demands on air and energy. From an annual emissions standpoint, the current permit allows only a minor increase in allowable emissions. A small increase in energy requirements via diesel fuel required to run the generator engine would be expected to occur, however, no more than a minor impact would be expected.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society – State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of operation. Search results concluded that there were no previously recorded historical or archaeological resources of concern within the Nelcon home pit area. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial

disturbance to the area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the equipment. However, if cultural materials are discovered during this project, or any future project location, the Montana Historical Society should be contacted.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project on the physical and biological environment in the immediate area would be minor due to the relatively small size and potential environmental impact of the operation. The Department believes that this facility would be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #3871-02 and the associated Addendum #3.

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

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

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

A. Social Structures and Mores

No more than a minor impact would be expected from the addition of the generator engine.

B. Cultural Uniqueness and Diversity

No increase in the number of employees required for operation would be expected to occur as the result of this permitting action. No more than a minor impact would be expected from the addition of the generator engine.

C. Local and State Tax Base and Tax Revenue

No more than a minor impact would be expected from the addition of the generator engine.

D. Agricultural or Industrial Production

No more than a minor impact would be expected from the addition of the generator engine.

E. Human Health

Conditions would be incorporated into MAQP #3871-02 to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be affected by the operation of the proposed equipment. The equipment would be initially and typically located within a preexisting industrial site. All recreational opportunities, if available in the area, would still be accessible. Noise from the equipment would be similar to the previous activity occurring within the Nelcon home pit. The pit is on private land and the Department has determined that the project would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities would be expected to be very minor.

G. Quantity and Distribution of Employment

Nelcon is not expected to require any additional employees to operate the proposed equipment. Therefore, there is no expected impact to the quantity and distribution of employment, and any actual impact would be expected to be very minor.

H. Distribution of Population

The proposed equipment is not expected to affect the distribution of population in the Nelcon home pit area. No employees would be expected to be relocated to the area as part of this permit action.

I. Demands for Government Services

Government services would continue to be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor.

J. Industrial and Commercial Activity

The operation would continue to be a small industrial source and be portable and temporary in nature. No more than a minor impact would be expected from the addition of the generator engine.

K. Locally Adopted Environmental Plans and Goals

Nelcon would be allowed by MAQP #3871-02 and the associated Addendum #3 to operate in areas designated by EPA as attainment or unclassified for ambient air quality and in or within 10 km of certain PM₁₀ nonattainment areas, including the Columbia Falls/Kalispell/Whitefish PM₁₀ nonattainment area where the Nelcon home pit is located. MAQP #3871-02 and Addendum #3 would contain production and opacity limits for protecting air quality. No more than a minor impact would be expected from the generator engine.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation. Furthermore, no other industrial operations are expected to result from this permitting action.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: MAQP #3871-02 and Addendum #3 would include conditions and limitations to protect air quality. No more than minor impacts would be expected from the generator engine.

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau

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