



Montana Department of
ENVIRONMENTAL **Q**UALITY

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September 19, 2011

Mr. Larry Goroski
Northern Express Transportation Authority
301 First Street South, Suite 3
Shelby, MT 59474

Dear Mr. Goroski:

Montana Air Quality Permit #2672-02 is deemed final as of September 17, 2011, by the Department of Environmental Quality (Department). This permit is for a Bulk Transfer Facility and 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

Doug Kuenzli
Environmental Science Specialist
Air Resources Management Bureau
(406) 444-4267

VW:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2672-02

Northern Express Transportation Authority
301 First Street South, Suite 3
Shelby, MT 59474

September 17, 2011



MONTANA AIR QUALITY PERMIT

Issued To: Northern Express Transportation
Authority
301 First Street South, Suite 3
Shelby, MT 59474

MAQP #2672-02
Administrative Amendment (AA) Request
Received: 07/13/2011
Department Decision on AA: 09/01/2011
Permit Final: 09/17/2011
AFS #101-0003

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Northern Express Transportation Authority (NETA), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location:

NETA operates a bulk transfer facility for the storage and distribution of fertilizer and cement products. The facility is located at the South East ¼ of Section 27, Township 32 North, Range 2 West, in Toole County, Montana. A complete list of permitted equipment is contained in Section I.A. of the Permit Analysis.

B. Current Permit Action:

On July 13, 2011, the Montana Department of Environmental Quality (Department) received correspondence from NETA requesting the Department to review certain conditions and limitations established in the permit which may not be consistent with those prescribed to similar sources permitted by the Department. In addition to an alternation of permit conditions the permit incorporates updated permit language and rule references used by the Department. See Section I.D of the Permit Analysis for a description and justification for updated permit conditions.

Section II: Conditions and Limitations

A. Emission Limitations

1. NETA shall, install, operate, and maintain the following equipment for particulate matter (PM) control in accordance with manufacturer's instructions and specifications to provide maximum control (ARM 17.8.749).
 - a. Baghouse dust filter.
 - b. Telescopic load-out spout (truck load-out).
 - c. Adjustable load-out spout and load-out drop sock (railcar load-out).
2. NETA shall fully enclose all internal material handling equipment; including bucket elevator, conveyors and distribution system and vent emissions to the baghouse dust filter (ARM 17.8.749).
3. NETA shall vent the railcar receiving pit and the truck receiving pit to the baghouse filter (ARM 17.8.749).

4. NETA shall install and maintain a device to measure the pressure drop across the baghouse filter (magnehelic gauge, manometer, etc.). Pressure drop must be measured in inches of water. (ARM 17.8.749).
5. NETA shall record pressure drop on the control device daily when in operation and records kept on site according to Section II.C.2. Dates the facility does not operate shall be noted in the records. (ARM 17.8.749).
6. NETA shall minimize product drop height during product load-out (ARM 17.8.749).
7. NETA shall not cause or authorize to be discharged into the atmosphere from any sources installed after November, 23 1968, that exhibit an opacity of 20% or greater average over 6 consecutive minutes (ARM 17.8.304).
8. NETA shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
9. NETA shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.8 (ARM 17.8.752).

B. Testing Requirements

1. All compliance tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

Emission Monitoring

C. Operational Reporting Requirements

1. NETA 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 and other related information, listed below, shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations. Information shall include (ARM 17.8.505);

- a. Total amount of each material received by railcar.
- b. Total amount of each material shipped by railcar.
- c. Total amount of each material received by truck.
- d. Total amount of material shipped by truck.
- e. Total operating hours of the facility.

2. NETA shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by NETA as a permanent business record for at least 5 years following the date of the measurement, shall be available for inspection by the Department, and shall be submitted to the Department upon request (ARM 17.8.749).
3. NETA 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).

Section III: General Conditions

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

- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by NETA 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. NETA 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
Northern Express Transportation Authority
MAQP #2672-02

I. Introduction/Process Description

Northern Express Transportation Authority (NETA) owns and operates a bulk transfer facility. The facility is located at the South East ¼ of Section 27, Township 32 North, Range 2 West, in Toole County, Montana.

A. Permitted Equipment

The NETA facility consists of dry material receiving and load-out apparatus, as well internal handling and storage equipment. The Bulk transfer facility has dry material storage capacity of approximately 19,200 cubic feet (ft³) with a maximum rated material handling throughput capacity of 5,000 ft³/hour. Equipment used at this facility includes, but is not limited to, the following:

- Truck receiving pit - 5,000 ft³/hour;
- Railcar receiving pit - 5,000 ft³/hour;
- Bucket elevator - 5,000 ft³/hour;
- Four (4) belt conveyors - 5,000 ft³/hour each;
- Bin scale hopper - 1,700 ft³/hour;
- Four (4) storage bins - 4,800 ft³ each;
- Railcar load-out spout (adjustable);
- Truck load-out spout (telescopic); and
- Baghouse particulate filter system.

B. Source Description

NETA will utilize the bulk transfer unit in receipt of various dry materials via railcar or truck to be held in storage for later shipment or to redirect for alternate shipment method, rail to truck or truck to rail. Materials received and handled at this facility include, potash, fertilizer, feed and feed supplement, sand, soda ash, salt, cement, and bentonite.

These dry materials are discharged into the receiving pit, where a bucket elevator lifts material to the rotary feeder for distribution to one of the bins for storage or directed to the weigh hopper for load-out. Transfer of material occurs through a series of enclosed belt conveyors. The bulk transfer facility is capable of material load-out to truck or railcar for shipment.

The entire material handling system is fully enclosed to minimize the release of dust to the atmosphere. Material receiving and handling systems are provided dust aspiration and control, where air with entrained dust particles is pulled from the enclosed system and ducted to a baghouse dust filter before exhausting to the atmosphere.

C. Permit History

On December 6, 1990, NETA submitted a permit application to install and operate a bulk transfer facility and associated equipment in Toole County. **MAQP #2672-00** was issued on March 6, 1991.

In 1999 the U.S. Environmental Protection Agency determined that any condition in an air quality preconstruction permit would be considered a federally enforceable condition. To allow removal of certain conditions that were never intended to become federally enforceable, the Montana Department of Environmental Quality (Department) notified all facilities holding preconstruction permits that a request for permit modification could be submitted to remove these permit condition based on the Administrative Rules of Montana (ARM) 17.8.756 and 17.8.315. Upon receipt of this notice NETA requested a modification and was subsequently issued **MAQP #2672-01** on June 16, 2000.

D. Current Permit Action

On July 13, 2011, the Department received correspondence from NETA requesting the review of certain conditions and limitations established in the permit which may not be consistent with those prescribed to similar sources permitted by the Department. Upon review of the facilities potential to emit and regulatory applicability the Department concluded that an administrative alternation of MAQP #2672-01 could proceed in order to align permit conditions, limitations, and requirements with current application of Department regulations and policies. **MAQP #2672-02** will replace MAQP #2672-01.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the 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 is 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).

NETA shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

NETA must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, NETA 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. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 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.
- 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 section 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.
- 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 air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year (tpy) of any pollutant. NETA has a PTE greater than 25 tpy of particulate matter (PM) and particulate matter with an aerodynamic diameter of ten microns or less (PM₁₀); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. 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 NETA of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tpy of any pollutant;
 - b. PTE > 10 tpy of any one hazardous air pollutant (HAP), PTE > 25 tpy of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tpy of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2672-02 for NETA, the following conclusions were made:
- The facility's PTE is less than 100 tpy for any pollutant.
 - The facility's PTE is less than 10 tpy for any one HAP and less than 25 tpy of all HAPs.
 - This source is not located in a serious PM₁₀ nonattainment area.
 - This facility is not subject to any current NSPS.
 - This facility not subject to any current NESHAP standards.
 - This source is not a Title IV affected source.
 - This source is not a solid waste combustion unit.
 - This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that NETA will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, NETA will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. NETA shall install on the new or modified 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

Emission Source	Emissions Tons/Year [PTE] ⁽¹⁾					
	Uncontrolled Emissions			Controlled Emissions		
	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Product Receiving - Railcar	740.20	476.57	111.03	11.10	7.15	1.67
Product Shipping - Truck Load-out	1133.62	314.33	170.04	99.37	26.67	14.91
Storage [Silo Vents]	10.04	1.62	0.61	10.04	1.62	0.61
Unpaved Roadways - Haul Roads	20.04	5.41	0.54	10.02	2.71	0.27
TOTAL EMISSIONS ►	1903.90	797.93	282.22	130.53	38.14	17.45

- Controlled emissions are used in determination of potential emissions and regulatory applicability;
 - Bulk Transfer Unit - Control efficiencies applied to PTE as collected/retained PM is reused as product, control equipment is considered processes equipment.
 - Roadways - Application of control for fugitive emissions is federally-enforceable pursuant to requirements established under ARM 17.8.308; therefore control efficiency is considered in determination of potential.

ft³, cubic feet

lbs, pounds

PM, particulate matter

PM₁₀, particulate matter with an aerodynamic diameter of 10 microns or less

PM_{2.5}, particulate matter with an aerodynamic diameter of 2.5 microns or less

Particulate Emissions - Controlled

PM Emissions (controlled):

Emission Factor 0.098 lbs/ton product [AP-42 Table 11.12-2, 6/06]
 Calculations (0.098 lbs/ton) * (tons/year) * (0.0005 lbs/ton) = 99.37 tons/year

PM₁₀ Emissions (controlled):

Emission Factor 0.0263 lbs/ton product [AP-42 Table 11.12-2, 6/06]
 Calculations (0.0263 lbs/ton) * (tons/year) * (0.0005 lbs/ton) = 26.67 tons/year

PM_{2.5}Emissions (controlled):

Emission Factor 0.0147 lbs/ton product (15% uncontrolled PM) [AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]
 Calculations (0.0147 lbs/ton) * (tons/year) * (0.0005 lbs/ton) = 14.91 tons/year

Storage [Silo Vents]

Throughput Capacity 2,027,940 tons/year
 Control Equipment: Baghouse Filter
 Estimated Control Efficiency (C_e): 98.5 [Emission factor applied accounts for control]

PM Emissions:

Emission Factor 0.0099 lbs/ton product [AP-42 Table 11.19.2-4, 8/04]
 Calculations (0.0099 lbs/ton) * (2027940 tons/year) * (0.0005 lbs/ton) = 10.04 tons/year (controlled)

PM₁₀ Emissions:

Emission Factor 0.0016 lbs/ton product [AP-42 Table 11.19.2-4, 8/04]
 Calculations (0.0016 lbs/ton) * (tons/year) * (0.0005 lbs/ton) = 1.62 tons/year (controlled)

PM_{2.5} Emissions:

Emission Factor 0.0006 lbs/ton product [AP-42 Table 9.9.1-1, 3/03]
 Calculations (0.0006 lbs/ton) * (tons/year) * (0.0005 lbs/ton) = 0.61 tons/year (controlled)

Unpaved Roadways (Haul Roads)

Vehicle Miles Travelled [VMT]: 6843.75 VMT-year
 VMT Basis: 0.25 miles per load at average bulk tanker volume of 1,600 ft³
 Control Method: Water Application
 Control Efficiency (C_e): 50%

Emission Factor $EF = [k(s/12)^a * (W/3)^b] * ((365 - p) / 365)$ [AP-42 13.2.2.2, 11/06]
 where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)
 k, Empirical Constant PM = 4.9 [AP-42 Table 13.2.2-2, 11/06]
 k, Empirical Constant PM₁₀ = 1.5 [AP-42 Table 13.2.2-2, 11/06]
 k, Empirical Constant PM_{2.5} = 0.15 [AP-42 Table 13.2.2-2, 11/06]
 s, Surface Material Silt Content (%) = 6.4 [AP-42 Table 13.2.2-1, 11/06]
 W, Mean Vehicle Weight (tons) = 27.5 [Applicant Provided]
 a, Empirical Constant PM = 0.7 [AP-42 Table 13.2.2-2, 11/06]
 a, Empirical Constant PM₁₀/PM_{2.5} = 0.9 [AP-42 Table 13.2.2-2, 11/06]
 b, Empirical Constant PM - PM_{2.5} = 0.45 [AP-42 Table 13.2.2-2, 11/06]
 p, Mean Precipitation Days [≥ 0.01 Inch] = 115 [AP-42 Figure 13.2.2-1, 11/06]

PM Emissions:

Emission Factor	$EF = [4.9 * (6.4/12)^{0.7} * (27.5/3)^{0.45}] * ((365 - 115) / 365) =$	5.86	lbs/VMT	
Calculations	$(5.86 \text{ lbs/VMT}) * (6843.75 \text{ VMT year}) =$	40089.59	lbs/year	uncontrolled
	$(40,089.59 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	20.04	TPY	
	$(40,089.59 \text{ lbs/year}) * (1 - 0.50 \text{ Ce}) =$	20044.8	lbs/year	controlled
	$(20,044.80 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	10.02	TPY	

PM₁₀ Emissions:

Emission Factor	$EF = [1.5 * (6.4/12)^{0.9} * (27.5/3)^{0.45}] * ((365 - 115) / 365) =$	1.58	lbs/VMT	
Calculations	$(1.58 \text{ lbs/VMT}) * (6843.75 \text{ VMT year}) =$	10822.47	lbs/day	uncontrolled
	$(10,822.47 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	5.41	TPY	
	$(10,822.47 \text{ lbs/year}) * (1 - 0.50 \text{ Ce}) =$	5411.24	lbs/year	controlled
	$(5,411.24 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	2.71	TPY	

PM_{2.5} Emissions:

Emission Factor	$EF = [0.15 * (6.4/12)^{0.9} * (27.5/3)^{0.45}] * ((365 - 115) / 365) =$	0.16	lbs/VMT	
Calculations	$(0.16 \text{ lbs/VMT}) * (6843.75 \text{ VMT year}) =$	1082.25	lbs/day	uncontrolled
	$(1,082.25 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	0.54	TPY	
	$(1,082.25 \text{ lbs/year}) * (1 - 0.50 \text{ Ce}) =$	541.12	lbs/year	controlled
	$(541.12 \text{ lbs year}) * (0.0005 \text{ tons/lb}) =$	0.27	TPY	

V. Existing Air Quality

NETA's bulk material transfer facility is to be located in the South East ¼ of Section 27, Township 32 North, Range 2 West, in Toole County, Montana. The air quality of this area is classified as unclassifiable/attainment for National Ambient Air Quality Standards (NAAQS) criteria pollutants, including particulate matter (PM₁₀/PM_{2.5}).

VI. Air Quality Impacts

The amount of controlled particulate emissions generated by this project is not expected to generate concentrations of PM₁₀ in the ambient air that exceed any set standard. The permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area.

VII. Ambient Air Quality Impacts

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

VIII. Taking or Damaging Implication Analysis

As required by 2-10-101 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.

IX. Environmental Assessment

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

Analysis Prepared By: Doug Kuenzli
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