Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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October 13, 2010

Mr. Scot Sessions
Busch Agricultural Resources, LLC
P.O. Box 789
Fairfield, MT 59436

Dear Mr. Sessions:

Montana Air Quality Permit #2723-04 is deemed final as of October 13, 2010, by the Department of Environmental Quality (Department). This permit is for a grain storage facility. 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

Deanne Fischer, PE
Environmental Engineer
Air Resources Management Bureau
(406) 444-3403

VW:DF
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2723-04

Busch Agricultural Resources, LLC.
Grain Storage Facility
P.O. Box 789
Fairfield, MT 59436

October 13, 2010

MONTANA AIR QUALITY PERMIT

Issued to: Busch Agricultural Resources, LLC
P.O. Box 789
Fairfield, MT 59436

MAQP: #2723-04
Administrative Amendment (AA)
Request Received: 04/12/2010
Department Decision on AA: 09/08/2010
Permit Final: 10/13/2010
AFS: #099-0002

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Busch Agricultural Resources, LLC (BARLLC), 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

BARLLC's Fairfield Elevator is located at the SW¼ of Section 34, Township 22 North, Range 3 West, in Teton County, Montana.

B. Current Permit Action

On April 12, 2010, the Department of Environmental Quality – Air Resources Management Bureau (Department) received a request from BARLLC to reduce the annual reporting requirements associated with the visible emissions observations. The current permit action is an administrative amendment pursuant to ARM 17.8.764 that removes the annual reporting requirements associated with the visible emissions observations at the bag filter system (south elevator) and updates the permit to reflect the current permit language and rule references used by the Department. This action would make the BARLLC conditions more consistent with those contained in other MAQPs for the same source category.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. BARLLC shall operate and maintain all emission control equipment in accordance with manufacturer's instructions to provide maximum pollution control (ARM 17.8.749).

2. BARLLC shall fully enclose all drag conveyors and bucket elevators and vent the emissions to the fabric filter (ARM 17.8.749).

3. BARLLC shall minimize product drop height and use a telescoping load-out chute during production load-out to ensure compliance with the 20% opacity limitation (ARM 17.8.749).

4. BARLLC shall vent the railcar receiving/unloading bin to the main dust control system (ARM 17.8.749).

5. BARLLC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

6. BARLLC 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).

7. BARLLC shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.6 (ARM 17.8.749).

8. BARLLC shall not cause to be discharged into the atmosphere from any affected facility, except a grain dryer, any process emission which (ARM 17.8.340 and Code of Federal Regulations (CFR) 40 CFR 60, Subpart DD):

   (1) Contains particulate matter in excess of 0.023 grams per dry standard cubic meter (g/dscm) (ca. 0.01 grains per dry standard cubic feet (gr/dscf)); and

   (2) Exhibits greater than 0 percent opacity.

9 On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, BARLLC shall not cause to be discharged into the atmosphere any fugitive emission from (ARM 17.8.340 and the Code of Federal Regulations (CFR) 40 CFR 60, Subpart DD):

   (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity;

   (2) Any grain handling operation which exhibits greater than 0 percent opacity; and

   (3) Any truck loading station which exhibits greater than 10 percent opacity.

10. BARLLC shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart DD (ARM 17.8.340 and 40 CFR 60, Subpart DD).

11. BARLLC shall process no more than 12 million bushels of grain per rolling 12-month period in the North and South Elevators combined (ARM 17.8.749).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up of the Railcar Loadouts, an EPA Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on the railcar receiving/unloading bin, to demonstrate compliance with the emission limitations contained in Section II.A.9 (ARM 17.8.340, and 40 CFR 60, Subpart A and Subpart DD).

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. BARLLC 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 is not 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).

   In addition, BARLLC shall submit the following information annually to the Department by March 1st of each year. The information may be submitted along with the annual emission inventory. This information is required for the annual emission inventory as well as to verify compliance with permit limitations (ARM 17.8.505):

   a. Bushels of grain received annually (North Elevator);

   b. Bushels of grain received annually (South Elevator);

   c. Bushels of grain cleaned annually (South Elevator);

   d. Bushels of grain shipped by rail annually (North Elevator);

   e. Bushels of grain shipped by rail annually (South Elevator);

   f. Bushels of grain shipped by truck annually (South Elevator);

   g. Hours of operation annually (North Elevator);

   h. Hours of operation annually (South Elevator);

   i. Amount of dust handled in the dust control system (South Elevator);

   j. Fugitive Emissions from vehicles:

      i. Total number of truckloads received annually;
      ii. Average truck capacity;
      iii. Average vehicle weight, loaded;
      iv. Average vehicle weight, unloaded;
      v. Average number of tires on vehicle'
      vi. Average trip length; and
      vii. Average vehicle speed.

k. Operation and Maintenance Program reporting:

i. Results of any opacity observations;
ii. Results of periodic inspections and any corrective action taken; and
iii. Any malfunctions, including date, time, nature of malfunction, any corrective action taken, and any exceedences of any applicable opacity standard.

2. BARLLC shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by BARLLC 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).

4. BARLLC shall document, by month, the total amount of grain received at this facility. By the 25th of each month, BARLLC shall total the grain received for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for the previous months shall be submitted along with the annual emissions inventory (ARM 17.8.749).

D. Operation and Maintenance Requirements

1. BARLLC shall comply with the following operating and maintenance schedule for the North and South Elevator's Gerber High Efficiency Cyclones (Dust Control Systems 1 & 2):

a. Daily

i. Check the air discharge from the system to ensure it is clean and dust free (20% opacity limit);
ii. Record daily observations and review to ensure that no gradual increase in emissions has been observed;
iii. Observe air lock turning and cyclone to ensure the dust is discharging continually; and
iv. Record any routine maintenance or corrective actions taken.

b. Monthly (during operating season)

i. Check the duct work and hoods for holes, leaks or obstructions; and
ii. Conduct housekeeping check of the elevator for piles of dust indicating leaks in the transfer systems; and
iii. Listen to the dust system to identify any leaks or obstructions.

c. Every 3 Months

i. Check the oil level in all gear boxes (do not overfill); and
ii. Check fan and motor bearings for heat, noise and/or excessive vibration.

d. Annually

i. Check all belt drives for wear and proper tension; and
ii. Visible emission testing shall be conducted in accordance with the requirements of Section II.C by a trained BARLLC employee.

2. BARLLC shall comply with the following operating and maintenance schedule for the South Elevator's Dust Bin Vent Fabric Filter:

a. Daily

i. Check for proper operation of the pressure gauge on filter;
ii. Record the reading on the filter pressure gauge;
iii. Check the air discharge from the system to ensure it is clean and dust free (5% opacity limit); and
iv. Record any routine maintenance or corrective actions taken.

b. Monthly (during operating season)

i. Check the fabric filter housing for holes, leaks or obstructions; and
ii. Check fan and purge motor bearings for heat, noise and/or excessive vibration.

c. Every 3 Months

i. Check the oil level in air compressor and all gear boxes (do not overfill); and
ii. Check fan and purge motor bearings for heat, noise and/or excessive vibration.

d. Annually

i. Check all belt drives for wear and proper tension; and
ii. Visible emission testing shall be conducted in accordance with the requirements of Section II.C by a trained BARLLC employee.

SECTION III: General Conditions

A. Inspection – BARLLC 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 (CEMS, 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 BARLLC fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving BARLLC 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.* (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, failure to pay the annual operation fee by BARLLC 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).

Montana Air Quality Permit (MAQP) Analysis
Busch Agricultural Resources, LLC
MAQP #2723-04

I. Introduction/Process Description

Busch Agricultural Resources, LLC (BARLLC) owns and operates a grain storage facility located in the SE¼ of Section 34, Township 22 North, Range 3 West, Teton County, Montana. The facility is known as the BARLLC – Fairfield Elevator.

A. Permitted Equipment

The BARLLC Fairfield Elevator consists of the following equipment:

1. North Elevator

   a. Enclosed truck unloading pit with scale;
   b. Two elevator legs with front and back pits, each rated at 3,000 bushels per hour (bph);
   c. Roto-flo distributor;
   d. Two covered screw conveyors (outgoing and reclaim);
   e. Sixteen grain storage bins (132,000 bushels (bu) total);
   f. Railcar loadout; and
   g. Dust conveying system.

2. South Elevator

   a. Enclosed truck unloading pit with scale;
   b. Two covered Sweet bucket elevator legs with front and back pits, each rated at 5,000 bph;
   c. Gerber Model 26-D-10 dual distributor, 10,000 bph (5,000 bph per channel);
   d. Carter Day rotary grain cleaner, 5000 bph;
   e. Four covered Sweet drag conveyors, 5000 bph each;
   f. Screening elevator let;
   g. Screening storage (two of ten bins in the annex);
   h. Crib house bins, 45,000 bu total;
   i. Ten annex bins, 12,000 bu each;
   j. Fumigation bin, 30,000 bu;
   k. Eight grain storage bins @ 97,000 bu each, (776,000 bu total);
   l. Five covered Sweet drag conveyors to storage bins, 9500 bph each;
   m. Five covered Sweet drag conveyors (reclaim) from the storage bins, 10,000 bph each;
   n. Covered Sweet bucket elevator leg (loadout only), 10,000 bph each;
   o. Two railcar loadouts with telescoping and swivel spouts;
   p. Two truck loadouts with spouts;
   q. Dust conveying system;
   r. Two transfer conveyors (25,000 bph total);
   s. Surge bin (25,000 bph drop gate);
   t. Eleven grain storage bins @ 217,000 bu each (2,387,000 total);
   u. Drag conveyors from new storage bins;
   v. New elevator leg (20,000 bph);
   w. Two railcar loadouts;
   x. Bag filter system (10,000 cubic feet per minute (cfm))

B. Source Description

This grain elevator facility is designed to receive and store grain from local farmers prior to shipment to a malt plant. The storage capacity of the facility is approximately 3.49 million bushels. Typically, the facility will receive grain via truck and/or railcar. Each truck and railcar will be weighed and a sample of the inbound grain will be obtained and analyzed to ensure the grain meets quality specifications. Once the grain is approved, the trucks and/or railcars will proceed to the appropriate elevator dump pit and be unloaded.

If the grain is unloaded in the North pit, one of two 3,000 bph legs elevates the grain to a distributor where it is further conveyed to the designated storage bin or on the South leg via an extended screw conveyor. The stored grain is removed from the storage tanks via enclosed conveyors, elevated to the distributor and loaded into railcars.

If the grain is unloaded at the South pit, one of two 5,000 bph legs elevates the grain to a distributor where it is further conveyed to the designated storage bin (971,000 bushels total storage capacity) or to the 5,000 bph Carter-Day rotary grain cleaner. The stored grain is removed from the storage tanks via a single dedicated 10,000 bph load-out elevator leg into railcars. The grain is cleaned, stored, and shipped out by either truck or railcar.

C. Permit History

BARLLC's North Elevator was constructed in the late 1940's and the South Elevator was constructed in about 1957. As existing sources, neither elevator had a permit. Busch Agricultural Resources, Inc. (BARI) purchased the north elevator from Montana Merchandising Company in 1987 and purchased the south elevator from Harvest States Cooperative in early 1989. The Department of Environmental Quality (Department) issued **MAQP #2723-00** to BARI on May 4, 1993.

On January 24, 1996, the Department issued MAQP #2723-01 to BARI. The permit action included the removal of the 3 million bushels per year throughput limit for each elevator and established a total throughput limit of 6 million bushels for both elevators. The modification allowed for greater operational flexibility and more efficient use of the south storage capacity without impacting annual air emissions. **MAQP #2723-01 replaced MAQP #2723-02.**

On September 23, 2004, the Department received an application from BARI for the installation of 11 additional 217,000 bushel storage bins, the installation of a 20,000 bph grain elevator and associated conveying equipment, and the upgrade of the two south railcar loadouts. The additional storage capacity at the facility would result in a total facility-wide storage capacity of 3.49 million bushels (MMBu), which would subject the facility to the Standards of Performance for New Stationary Sources (NSPS) Subpart DD, Standards of Performance for Grain Elevators. In addition, the existing permit limits were based upon outdated AP-42 emission factors. The permit action updated the AP-42 emission factors for calculating allowable emission rates. **MAQP #2723-02 replaced MAQP #2723-01.**

On February 5, 2008, the Department received a request from BARLLC to change the name on MAQP #2723-02 from BARI to BARLLC. The permit action changed the name on MAQP #2723-02 and updated the permit to reflect the current permit language and rule references used by the Department. **MAQP #2723-03 replaced MAQP #2723-02.**

D. Current Permit Action

On April 12, 2010, the Department received a request to reduce the annual reporting requirements associated with the visible emissions observations at the south elevator bag filter system. The current permit action eliminates Section II.B.4 including the annual reporting requirements for visible emissions observations and updated the permit to reflect the current permit language and rule references used by the Department. This action would make the BARLLC conditions more consistent with those contained in other MAQPs for the same source category. **MAQP #2723-04 replaces MAQP #2723-03.**

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 Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This section 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).

   BARLLC 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 Testing 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 which, without resulting in reduction in 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 the following:

1. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
2. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

BARLLC 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 an 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 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. (2) Under this section, BARLLC 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, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). BARLLC is considered an NSPS-affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators. Subpart DD applies to all affected facilities constructed, modified, or reconstructed after August 3, 1978, that have the capacity to store 1 million bushels of grain. This facility has the capacity to store greater than 1 million bushels of grain; therefore, 40 CFR 60, Subpart DD, is applicable to this facility.

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. The current permit action is an administrative permit action and does not require an application fee.

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; and 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 air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. BARLLC has PTE greater than 25 tons per year of particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}); 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. BARLLC was not required to submit a permit application for the current permit action because the current permit action is considered an administrative action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. The current permit action is an administrative amendment; therefore, did not require publication.

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, which 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 BARLLC 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. 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 chapter.

2. ARM 17.8.818 Review of Major Stationary Source and major Modifications – Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act that it would emit, except as this chapter would otherwise allow.

   This facility is not a major stationary source because it is not a listed source and does not have the PTE more than 250 tons per year or more of any air pollutant from point sources of 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 source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), or PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} non-attainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 #2723-04 for BARLLC, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for all criteria pollutants.

   b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.

   c. This source is not located in a serious PM_{10} non-attainment area.

   d. This facility is subject to a current NSPS: 40 CFR 60, Subpart DD, Standards of Performance for Grain Elevators.

   e. This facility is not subject to any current NESHAP standards.

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

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

Based on these facts, the Department determined that BARLLC would 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, BARLLC will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. BARLLC 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 analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emissions Inventory

Air Pollutants (ton/year) – North Elevator						
Source	PM	PM_{10}	NO_x	VOC	CO	SO_2
Grain Unloading	7.4	2.4	---	---	---	---
Crib Bins (Headhouse)	1.39	0.77	---	---	---	---
Conveyors	1.39	.77	---	---	---	---
Storage Bins	1.39	.77	---	---	---	---
Grain Load-Out	.97	.08	---	---	---	---
Fugitive Dust	1.9	1.9	---	---	---	---
Total Emissions (North)	14.44	6.69	na	na	na	na
Air Pollutants (ton/year) – South Elevator						
Source	PM	PM_{10}	NO_x	VOC	CO	SO_2
Grain Unloading	4.09	1.34	---	---	---	---
Crib Bins (Headhouse)	1.39	.77	---	---	---	---
Grain Cleaner	1.39	.77	---	---	---	---
Conveyors	1.39	.77	---	---	---	---
Storage Bins	1.39	.77	---	---	---	---
Dust Conveyors	.03	.01	---	---	---	---
Storage (Headhouse expansion)	.03	.01	---	---	---	---
Grain Load-Out	.01	.001	---	---	---	---
Fugitive Dust	1.9	1.9	---	---	---	---
Total Emissions (South)	14.93	7.11	na	na	na	na
Total Facility Emissions	29.37	13.80	na	na	na	na

North Elevator

Grain Unloading (North Pit)

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.18 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.18 lb/ton * ((1 – 0.842) + (0.85 x (1-0.842))) * 1 ton/2,000 lb = 7.4 ton/yr

PM_{10} Emissions:
Emission Factor = 0.059 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.059 lb/ton ((1 – 0.842) + (0.85 x (1-0.842))) * 1 ton/2,000 lb = 2.4 ton/yr

Crib Bins (Headhouse)

Maximum Annual Throughput = 12,000,000 bu/year
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 1.39 ton/year

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 0.77 ton/yr

Conveyors (Bin Removal)

Maximum Annual Throughput = 12,000,000 bu/year
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 84.2% {Cyclone – Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1-0.842) * 1 ton/2,000 lb = 1.39 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 84.2%
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1-0.842) 1 ton/2,000 lb = .77 ton/yr

Headhouse (Storage Bins)

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone - Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1-.842) * 1 ton/2,000 lb = 1.39 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2 {Cyclone - Permit Application}
Calculations: 288,000 ton/yr * 0.059 lb/ton * (1-.842) * 1 ton/2,000 lb = .77 ton/yr

Load-Out/Shipping

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.027 lb/ton {AP-42, Table 9.9.1-1, 5/98, Grain Shipping/Railcar}
Estimated Control Efficiency = 75% {Tel. Chute – Permit Application}
Calculations: 288,000 ton/yr * 0.027 lb/ton * (1-0.75) * 1 ton/2,000 lb = .97 ton/yr

PM_{10} Emissions:
Emission Factor = 0.0022 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 75%
Calculations: 288,000 ton/yr * 0.0022 lb/ton * (1-0.75) 1 ton/2,000 lb = .079 ton/yr

Fugitive Dust, Access Roads

Fugitive Emissions:
Calculations: 1.56 lb/VMT * 1.3 VMT/hr = 2.0 lb/hr
2.0 lb/hr * 1875 hr/yr = 1.9 ton/yr

South Elevator

Grain Unloading (South Pit)

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.18 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.18 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 4.09 ton/yr

PM_{10} Emissions:
Emission Factor = 0.059 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.059 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 1.34 ton/yr

Crib Bins (Headhouse)

Maximum Annual Throughput = 12,000,000 bu/year
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 1.39 ton/year

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 0.77 ton/yr

Grain Cleaner

Maximum Annual Throughput = 12,000,000 bu/year
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 1.39 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 84.2% {Cyclone-Permit Application}
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1 – 0.842) * 1 ton/2,000 lb = 0.77 ton/yr

Conveyors (Bin Removal)

Maximum Annual Throughput = 12,000,000 bu/year
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 84.2% {Cyclone – Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1-0.842) * 1 ton/2,000 lb = 1.39 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 84.2%
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1-0.842) 1 ton/2,000 lb = .77 ton/yr

Headhouse (Storage Bins)

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.086 lb/ton {AP-42, Table 9.9.1-1, 5/98, Truck}
Estimated Control Efficiency = 0% {Permit Application}
Calculations: 418,110 ton/yr * 0.086 lb/ton * 1 ton/2,000 lb = 18 ton/year

PM_{10} Emissions:
Emission Factor = 0.029 lb/ton {AP-42, Table 9.9.1-1, 5/98, Truck}
Estimated Control Efficiency = 0% {Permit Application}
Calculations: 418,110 ton/yr * 0.059 lb/ton * 1 ton/2,000 lb = 12.3 ton/yr

Dust Conveyors

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 99.7% {Vent Filter – Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1-0.997) * 1 ton/2,000 lb = .03 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 99.7%
Calculations: 288,000 ton/yr * 0.034 lb/ton * (1-0.997) 1 ton/2,000 lb = .01 ton/yr

Headhouse (New Storage Bins)

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 99.7% {MAC Baghouse - Permit Application}
Calculations: 288,000 ton/yr * 0.061 lb/ton * (1-.842) * 1 ton/2,000 lb = .03 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98, Headhouse and Grain Handling}
Estimated Control Efficiency = 99.7% {MAC Baghouse - Permit Application}
Calculations: 288,000 ton/yr * 0.059 lb/ton * (1-.842) * 1 ton/2,000 lb = .01 ton/yr

Load-Out/Shipping

Maximum Annual Throughput = 12,000,000 bu/yr
Approximate Product Density = 48 lb/bu
Approximate Process Rate = 48 lb/bu * 12.0 x 10^6 bu/yr * 1 ton/2000 lb = 288,000 ton/yr

PM Emissions:
Emission Factor = 0.027 lb/ton {AP-42, Table 9.9.1-1, 5/98, Grain Shipping/Railcar}
Estimated Control Efficiency = 99.7% {Cyclone – Permit Application}
Calculations: 288,000 ton/yr * 0.027 lb/ton * (1-0.997) * 1 ton/2,000 lb = .01 ton/yr

PM_{10} Emissions:
Emission Factor = 0.0022 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 99.7%
Calculations: 288,000 ton/yr * 0.0022 lb/ton * (1-0.997) 1 ton/2,000 lb = .001 ton/yr

Fugitive Dust, Access Roads

Fugitive Emissions:
Calculations: 1.56 lb/VMT * 1.3 VMT/hr = 2.0 lb/hr
2.0 lb/hr * 1875 hr/yr = 1.9 ton/yr

V. Existing Air Quality and Ambient Air Impact Analysis

BARLLC's Fairfield Grain Elevator is located in the SE¼ of Section 34, Township 22 North, Range 3 West, in Teton County, Montana. The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The proposed permit change is an administrative change and, therefore, will not cause or contribute to an exceedance of any ambient air quality standard.

III. 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	
✓		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	✓	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	✓	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	✓	4. Does the action deprive the owner of all economically viable uses of the property?
	✓	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?
	✓	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	✓	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?
	✓	7a. Is the impact of government action direct, peculiar, and significant?
	✓	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	✓	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?
	✓	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.

IV. Environmental Assessment

The current permit 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.

Permit Analysis Prepared By: Deanne Fischer
Date: August 10, 2010