



Montana Department of
ENVIRONMENTAL QUALITY

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March 22, 2013

Kris Smelser – Regional Manager
MillerCoors LLC – Power Elevator
P.O. Box 217
Power, Montana 59468

Dear Mr. Smelser:

Montana Air Quality Permit #4847-00 is deemed final as of March 22, 2013, by the Department of Environmental Quality (Department). This permit is for a grain elevator. 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

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

JM:EW
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4847-00

MillerCoors LLC – Power Elevator
P.O. Box 217
Power, Montana 59468

March 22, 2013



MONTANA AIR QUALITY PERMIT

Issued To: MillerCoors LLC
Power Elevator
P.O. Box 217
Power, MT 59468

MAQP: #4847-00
Application Complete: 01/15/13
Preliminary Determination Issued: 2/14/13
Department's Decision Issued: 3/6/13
Permit Final: 3/22/13
AFS #: 099-0005

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

Section I: Permitted Facilities

A. Permitted Equipment

MillerCoors proposes to construct a barley storage and elevator facility with the ability to ship and receive 20,000 bushels of barley per hour and with a storage capacity of 3.4 million bushels (170 million pounds). This facility would be referred to as the Power Elevator. The facility would include two truck and one railcar unloading pits and loadout facilities for both trucks and railcars; conveyor systems; a combination aspirator/screen cleaner; eight round storage bins; a scale system; and a system for capturing materials (fines) from the cleaning process and pollution control devices. The facility would utilize one baghouse to control emissions from all receiving and shipping loading and one baghouse to control emissions from the barley cleaning. Emission points at the Power Elevator include:

1. Truck unloading (2 pits – straight or hopper bottom trucks)
2. Railcar unloading
3. Headhouse and grain handling
4. Grain cleaning
5. Grain storage (8 bins)
6. Truck loadout for shipping
7. Railcar loadout for shipping
8. Fines (materials from cleaning and captured by baghouses) bin
9. Fines loadout to truck for shipping
10. Unpaved haul roads

B. Plant Location

The proposed location for the Power Elevator is at 1350 7th Road Northeast, Power, Montana. The legal location is Section 26, Township 23 North, Range 1 West, in Teton County.

Section II: Conditions and Limitations

A. Emission Limitations

1. MillerCoors shall install, operate, and maintain the following emission control equipment in accordance with manufacturer's instructions to provide maximum pollution control (ARM 17.8.752):

- a. Partial enclosure for the truck and railcar unloading pits and fully enclosed handling equipment for all of the headhouse and grain handling operations, all vented to a baghouse (Baghouse #01).
 - b. A baghouse for the grain cleaning operations (Baghouse #02).
 - c. A Dust Control and Loading (DCL) discharge spout on the grain truck, fines truck, and railcar loadouts.
 - d. A baghouse for the fines, truck, and railcar loadouts (Baghouse #01).
2. Emissions from Baghouse #01 shall not exceed the following limits (ARM 17.8.752):
 - a. 0.45 pounds per hour (lb/hr) of particulate matter (PM)
 - b. 0.35 lb/hr of PM with an aerodynamic diameter of 10 microns or less (PM₁₀)
 - c. 0% opacity
 3. Emissions from Baghouse #02 shall not exceed the following limits (ARM 17.8.752):
 - a. 0.36 lb/hr of PM
 - b. 0.09 lb/hr of PM₁₀
 - c. 0% opacity
 4. MillerCoors 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).
 5. MillerCoors shall apply water or chemical dust suppressant as necessary to the haul road to minimize visible emissions (ARM 17.8.752).
 6. MillerCoors shall post and enforce a 25 mile per hour (mph) speed limit on the haul road (ARM 17.8.749).
 7. MillerCoors shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators (ARM 17.8.340 and 40 CFR 60, Subpart DD).

B. Testing Requirements

1. Within 60 days after achieving maximum production rate, but no later than 180 days from initial startup, an Environmental Protection Agency (EPA) Methods 1-5 and 9 performance test shall be performed on Baghouse #01 and Baghouse #02 to demonstrate initial compliance with their applicable emission limits. Each baghouse does not need to be tested simultaneously; however, the EPA Methods 1-5 and 9 tests must be conducted concurrently on a particular baghouse. MillerCoors may choose to infer compliance with PM₁₀ if the Method 5 result is less than the PM₁₀ limits or perform separate PM₁₀-specific test; however, 40 CFR 60, Subpart DD requires EPA Methods 1-5 and 9 for demonstrating initial compliance with the emission standard (ARM 17.8.105; ARM 17.8.749; and 40 CFR 60, Subparts A and DD).
2. After the initial compliance demonstration described in Section II.B.1 has been satisfied, testing shall continue for each baghouse on an every-two-year basis using the test methods described in Section II.B.1, or another schedule and/or methods as approved by the Montana Department of Environmental Quality – Air Resources Management Bureau (Department) (ARM 17.8.749).

3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. MillerCoors 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 to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

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

D. Notification

MillerCoors shall provide the Department with written notification of the following dates within the specified time periods (ARM 17.8.749):

1. Commencement of construction of the facility within 30 days after commencement of construction.
2. Actual start-up date of the facility within 15 days after the actual start-up.
3. All compliance tests, as required by the Montana Source Test Protocol and Procedures Manual.

SECTION III: General Conditions

- A. Inspection – MillerCoors 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 the terms, conditions, and matters stated herein shall be deemed accepted if MillerCoors fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving MillerCoors 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 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 the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by MillerCoors 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
MillerCoors LLC – Power Elevator
MAQP #4847-00

I. Introduction/Process Description

MillerCoors LLC (MillerCoors) proposes to construct and operate a barley grain elevator. The facility is located in Section 26, Township 23 North, Range 1 West, in Teton County, and is known as the Power Elevator.

A. Permitted Equipment

The Power Elevator has grain receiving, handling, cleaning, storage, and loadout equipment. The facility would include two truck and one railcar unloading pits and loadout facilities for both trucks and railcars; conveyor systems; a combination aspirator/screen cleaner; eight round storage bins; a scale system; and a system for capturing materials (fines) from the cleaning process and pollution control devices. There are the following emission points:

1. Truck unloading (2 pits – straight or hopper bottom trucks)
2. Railcar unloading
3. Headhouse and grain handling
4. Grain cleaning
5. Grain storage (8 bins)
6. Truck loadout for shipping
7. Railcar loadout for shipping
8. Fines (materials from cleaning and captured by baghouses) bin
9. Fines loadout to truck for shipping
10. Unpaved haul roads

B. Source Description

The Power Elevator would have a receiving and shipping capacity of 20,000 bushels per hour and a storage capacity of 3.4 million bushels. Barley would be received from farmers by truck or railcar via two enclosed truck receiving pits and one enclosed rail receiving pit. The pits would be configured with a common receiving drag conveyor rated at 20,000 bushels per hour. Received grain would be routed through a combination aspirator/screen cleaner. Barley would be stored in eight round bins. The facility would be designed such that barley can be reclaimed from the bins at a rate of 20,000 bushels per hour. The grain would be elevated and dropped into a scale system then loaded into either railcars or trucks for shipping. Materials (fines) from cleaning and fines captured in the baghouses would be collected in a bin and loaded to trucks for removal.

All conveyors would be enclosed. A dust collection system equipped with a baghouse would be used to control emissions from the receiving pits, loadout spouts, conveyors, elevators, and reclaim system. A dedicated baghouse would also be used to control emissions from the aspirator/cleaner.

An unpaved haul road with a 25 mile per hour speed limit would provide access to the elevator. Dust suppressant or water would be applied as needed to the road to minimize dust.

C. Response to Public Comments

Person/Group Commenting	Permit Reference	Comment	Department Response
MillerCoors	Description of Permitted Equipment: Section I.A of the Permit and of the Permit Analysis	In Section I.A. of the Permit (page 1) and of the Analysis (page 1) it is stated that the facility includes “a reclaim system for capturing materials (fines) from the cleaning process and pollution control devices.” While this is correct, the system used to remove grain from storage for loadout is also often referred to as “the reclaim system.” To avoid confusion, it is suggested that the word “reclaim” be deleted from the Permitted Equipment descriptions.	The Department has made the requested change. The same language was also updated in the Environmental Assessment “Description of Project” section.
MillerCoors	Receiving Enclosure: Permit Condition II.A.1.a	Permit Condition II.A.1.a. (page 2) requires a total enclosure for the truck and railcar unloading pits. A total enclosure will be constructed around the truck and railcar unloading pits; however, the doors on either end of the enclosure will be open during receiving operations. This operating practice was inadvertently not described in the application. The emission estimates for receiving did not include a specific control efficiency for the enclosure, and it is requested that Condition II.A.1.a. either refer to the enclosure as a “partial enclosure” or otherwise indicate that it is acceptable for the doors of the total enclosure to be open during operations.	The Department concurs that the primary method of emission control for the truck and railcar unloading pits is the baghouse and the control efficiency provided by the baghouse was the only consideration when calculating the maximum potential emissions. The Department has made the requested change.
MillerCoors	Truck and Railcar Unloading Emissions: Section III.A.5 of the Analysis	In Section III.A.5. of the Analysis (page 7) the PM ₁₀ emission rate for truck and railcar unloading is listed as 0.73 lb/hr. As shown in Section IV of the analysis (page 14), the PM ₁₀ emission rate for Incoming Grain Receiving is 0.73 tons/year (emphasis added) and the value shown in Section III.A.5.appears to be a typographical error. It is requested that the hourly value shown in Section III.A.5. be corrected to 0.17 lb/hr.	The Department concurs and has made the requested change.

II. Applicable Rules and Regulations

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

MillerCoors 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 the following:

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 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

MillerCoors 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, MillerCoors 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 17.8.322 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 rule.
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 is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). MillerCoors 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 applies to each affected facility at any grain terminal elevator which has a permanent storage capacity of more than 2.5 million bushels. The Power Elevator would have a permanent storage capacity of 3.4 million bushels; therefore, this subpart applies.

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. MillerCoors submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. 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 prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year (TPY) of any pollutant. MillerCoors has a PTE greater than 25 TPY of particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM₁₀), and PM with an aerodynamic diameter of 2.5 or less (PM_{2.5}); 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. MillerCoors submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. MillerCoors submitted an affidavit of publication of public notice for the December 22, 2012, issue of the *Great Falls Tribune*, a newspaper of general circulation in the Town of Great Falls in Cascade County, as proof of compliance with the public notice requirements.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving MillerCoors 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. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any 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 PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (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 #4847-00 for MillerCoors, the following conclusions were made:
- a. The facility's PTE is less than 100 TPY for any non-fugitive pollutant.
 - b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment 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 MillerCoors 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, MillerCoors will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. MillerCoors 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 submitted by MillerCoors in permit application #4847-00, addressing some available methods of controlling PM, PM₁₀, and PM_{2.5} emissions from the barley receiving, handling, cleaning, storage, and loadout operations. The Department reviewed these methods, as well as previous BACT determinations. All of the processes at the Power Elevator are sources of PM, PM₁₀, and PM_{2.5} and visible emissions only; therefore, these are the only pollutants addressed in this BACT analysis. The following control options have been reviewed by the Department in order to make the following BACT determination.

A. Truck and Railcar Unloading

The facility would include two truck and one railcar unloading pits.

1. Identify All Control Technologies

- Baffles in the unloading pits
- Choke unloading
- Partial and total enclosures
- Partial and total enclosures vented to control devices

2. Eliminate Technically Infeasible Options

All of the proposed control options are technically feasible in this application. The control devices that could be used in conjunction with partial and total enclosures include baghouses, cyclones, scrubbers, and electrostatic precipitators. Electrostatic precipitators cannot be used in grain elevators because they present an explosion hazard; therefore, they are not technically feasible for a control device. Scrubbers present water and solid waste issues and are therefore removed from consideration as a potential control device.

3. Rank Remaining Control Technologies by Control Effectiveness

While each of the technologies identified provide some level of control effectiveness, partial and total enclosures vented to a control device provides the greatest potential control efficiency. The remaining technically feasible control devices are cyclones and baghouses. While both are considered effective technologies for controlling PM emissions, conventional single cyclones have control efficiencies in the range of 0-90% across the range of PM sizes according to EPA Control Technology Factsheet EPA-452/F-03-005. Baghouses are capable of design efficiencies from 99-99.9% across the range of PM sizes according to EPA Control Technology Factsheets EPA-452/F-03-024 and 025.

4. Evaluate the Most Effective Controls

MillerCoors proposed to use partial enclosures vented to a baghouse to control emissions from the truck and railcar unloading. The baghouses would provide a PM and PM₁₀ control efficiency greater than 99% and a PM_{2.5} control efficiency of 99%. No further evaluation of other controls is necessary because MillerCoors selected the highest level of control efficiency.

5. Select BACT

40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators establishes a PM emission standard of 0.01 grains per dry standard cubic foot (gr/dscf) from any non-fugitive process except a grain dryer. The emissions inventory provided by MillerCoors in their MAQP application reflects the control efficiencies of their proposed BACT and indicates that compliance with the BACT limits would also be in compliance with the NSPS. The Department has determined that BACT for PM, PM₁₀, and PM_{2.5} from the truck and railcar unloading is partial enclosure vented to a baghouse with an emission limit of 0.22 lb/hr for PM and 0.17 lb/hr for PM₁₀. No BACT limit has been established for PM_{2.5} because of the relatively low potential levels of uncontrolled PM_{2.5} and a properly operated baghouse that complies with the other PM BACT limits would have a collateral benefit of good control of PM_{2.5} emissions as well. Since the proposed baghouse would also control emissions from the headhouse and grain handling operations, as well as the truck and railcar loadout operations, and vent all of the emissions to through a common stack, the emission limits from each of the processes would be combined for compliance purposes.

While 40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators describes visible fugitive emission standards for any individual truck or railcar unloading station as not to exceed 5% opacity, the selected PM BACT for truck and railcar unloading results in the emissions being discharged to the atmosphere via an exhaust stack. The term *fugitive emission* as defined in this subpart means the PM “which is not collected by a capture system and is released directly into the atmosphere...” Therefore, truck and railcar emissions that have been collected by the baghouse and released to the atmosphere via an exhaust stack are not fugitive emissions but rather point source process emissions. 40 CFR

60, Subpart DD states that any process emissions at an affected facility must not exceed 0% opacity. Since a BACT limit cannot be greater than an NSPS, BACT for visible emissions from truck and railcar unloading is that they shall not exceed 0% opacity as observed at the baghouse exhaust.

B. Headhouse and Grain Handling

This emission unit includes all grain handling equipment at the facility (legs, conveyors, distributors, scales, etc.)

1. Identify All Control Technologies

- Design and sealing practices that limit the effect of air currents
- Design that minimizes grain free fall distances and grain velocities
- Choke flow practices
- Oil suppression
- Enclosed handling equipment
- Enclosed handling equipment vented to a control device

2. Eliminate Technically Infeasible Options

All of the proposed control options are technically feasible in this application. The control devices that could be used in conjunction with enclosure handling equipment include baghouses, cyclones, scrubbers, and electrostatic precipitators. Electrostatic precipitators cannot be used in grain elevators because they present an explosion hazard; therefore, they are not technically feasible for a control device. Scrubbers present water and solid waste issues and are therefore removed from consideration as a potential control device.

3. Rank Remaining Control Technologies by Control Effectiveness

While each of the technologies identified provide some level of control effectiveness, enclosure handling equipment vented to a control device provides the greatest potential control efficiency. The remaining technically feasible control devices are cyclones and baghouses. As discussed in the truck and railcar loadout BACT analysis, single cyclones have typical control efficiencies ranging from 0-90% across the range of PM sizes whereas baghouses have typical control efficiencies ranging from 99-99.9% across the range of PM sizes.

4. Evaluate the Most Effective Controls

MillerCoors proposed to design the Power Elevator with sealing practices that limit the effects of air currents along with facility design that minimizes grain free fall distances where possible. In addition, all grain handling equipment would be enclosed and vented to a baghouse with a PM₁₀ control efficiency greater than 99% and a PM_{2.5} control efficiency of 99%. No further evaluation of other controls is necessary because MillerCoors selected the highest level of control efficiency.

5. Select BACT

40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators establishes a PM emission standard of 0.01 gr/dscf from any non-fugitive process except a grain dryer. The emissions inventory provided by MillerCoors in their MAQP application reflects the control efficiencies of their proposed BACT and indicates that compliance with the BACT limits

would also be in compliance with the NSPS. The Department has determined that BACT for the Headhouse and Grain Handling operations is enclosed handling equipment vented to a baghouse with an emission limit of 0.11 lb/hr for PM, 0.10 lb/hr for PM₁₀, and 0% opacity for visible emissions. No BACT limit has been established for PM_{2.5} because of the relatively low potential levels of uncontrolled PM_{2.5} and a properly operated baghouse that complies with the other PM BACT limits would have a collateral benefit of good control of PM_{2.5} emissions as well. Since the proposed baghouse would also control emissions from the truck and railcar unloading operations, as well as the truck and railcar loadout operations, the emission limits from both processes would be combined for compliance purposes.

C. Grain Cleaning

Received grain would be routed through a combination aspirator/screen cleaner. Grain cleaning emissions are usually vented through a stack and controlled using a standard PM control device.

1. Identify All Control Technologies

- Electrostatic precipitator
- Baghouse
- Cyclone
- Scrubber

2. Eliminate Technically Infeasible Options

Electrostatic precipitators cannot be used in grain elevators because they present an explosion hazard; therefore, they are not technically feasible for a control device. Scrubbers present water and solid waste issues and are therefore removed from consideration as a potential control device.

3. Rank Remaining Control Technologies by Control Effectiveness

Single cyclones have typical control efficiencies ranging from 0-90% across the range of PM sizes whereas baghouses have typical control efficiencies ranging from 99-99.9% across the range of PM sizes.

4. Evaluate the Most Effective Controls

MillerCoors proposed to use a baghouse to control the emissions from Grain Cleaning. No further evaluation of other controls is necessary because MillerCoors selected the highest level of control efficiency.

5. Select BACT

40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators establishes a PM emission standard of 0.01 gr/dscf from any non-fugitive process except a grain dryer. The emissions inventory provided by MillerCoors in their MAQP application reflects the control efficiencies of their proposed BACT and indicates that compliance with the BACT limits would also be in compliance with the NSPS. The Department has determined that BACT for the Grain Cleaning is a baghouse with an emission limit of 0.36 lb/hr for PM, 0.09 lb/hr for PM₁₀, and 0% opacity for visible emissions. No BACT limit has been established for PM_{2.5} because of the relatively low potential levels of uncontrolled PM_{2.5} and a properly operated baghouse that complies with the other PM BACT limits would have a collateral benefit of good control of PM_{2.5} emissions as well.

D. Grain Storage Bin

The facility would include eight round storage bins, approximately 95 feet in diameter and 100 feet tall, with more than 20 vents per bin. Storage bin vents are small openings located at the top of the bins that are used to vent air from the bins as the grain enters. The grain flow into a bin induces a flow of air with the grain, and the grain also displaces air out of the bin.

1. Identify All Control Technologies – fabric filters are the most readily used control device on bin vents.

2. Eliminate Technically Infeasible Options

Fabric filters are technically feasible for this application.

3. Rank Remaining Control Technologies by Control Effectiveness

There is only one control technology to evaluate in this instance.

4. Evaluate the Most Effective Controls

MillerCoors uses passive bin vent filters on some of their other facilities, but given the size of the proposed Power Elevator storage bins and number of vents needed it was determined that a system which collected the emissions from all of the vents and directed them to a single baghouse would be more cost effective than multiple individual bin vent filters. Even with the minimum number of 160 vents (8 bins with 20 vents each), the majority of the cost associated with using passive bin vent filters would not be in the bin vent filters themselves, but with the equipment needed for periodic replacement of the filters. To change or unclog the filters, each bin would have to be equipped with a catwalk that would allow for access to each of the vents. It was determined that ducting all 160 of the vents to a baghouse would be more cost effective, and safer, than providing the necessary access to bin vent filters on each of the eight bins. MillerCoors supplied a cost estimate for controlling the bins with such a baghouse system from Halverson, an engineering and construction company, which estimated an installed cost of \$94,645 per bin. Calculations of the cost effectiveness of this control technology result in a cost per ton of pollutant reduction of over \$6000 for PM₁₀ and over \$36,000 for PM_{2.5}. These costs are greater than what the Department would consider appropriate for the control they would provide in the given application. Therefore, passive fabric filters or a single baghouse system are eliminated from consideration due to economic infeasibility.

5. Select BACT

The Department has determined that proper operation of the storage bins with no additional control is BACT for the grain storage bins.

E. Truck and Railcar Loadout

The facility would include a grain truck loadout, a fines truck loadout, and a railcar loadout. Unless otherwise specified, a reference to a truck loadout refers to both the grain truck and fines truck loadout.

1. Identify All Control Technologies

- Flexible socks for truck unloading
- Telescoping spouts for railcar loading
- Oil suppression
- Partial and total enclosures
- Partial and total enclosures vented to control devices
- Dust Control and Loading (DCL) discharge spouts vented to control devices

2. Eliminate Technically Infeasible Options

All of the proposed control options are technically feasible in this application. A DCL discharge spout draws dust-laden air in from the around the mouth of the discharge spout during loadout operations and routes it to a control device. The control devices that could be used in conjunction with DCL discharge spouts and partial and total enclosures include baghouses, cyclones, scrubbers, and electrostatic precipitators. Electrostatic precipitators cannot be used in grain elevators because they present an explosion hazard; therefore, they are not technically feasible for a control device. Scrubbers present water and solid waste issues and are therefore removed from consideration as a potential control device.

3. Rank Remaining Control Technologies by Control Effectiveness

While each of the technologies identified provide some level of control effectiveness, the Department considers capturing and directing the emissions to a control device to provide the greatest potential for control efficiency. It is difficult to assign a value to the level of control effectiveness for enclosures and the DCL discharge spouts; however, the DCL discharge spout appears to offer the most potential because it captures the emissions directly at their release point for routing to a control device. The remaining technically feasible control devices are cyclones and baghouses. As discussed in the truck and railcar loadout BACT analysis, single cyclones have typical control efficiencies ranging from 0-90% across the range of PM sizes whereas baghouses have typical control efficiencies ranging from 99-99.9% across the range of PM sizes.

4. Evaluate the Most Effective Controls

MillerCoors proposed to employ DCL discharge spouts on each of the truck, railcar, and fines loadouts and direct those emissions to a baghouse with a PM and PM₁₀ control efficiency greater than 99% and a PM_{2.5} control efficiency of 99%. The facility would utilize the truck and railcar receiving baghouse for this purpose. Some additional level of control would occur with the grain truck and railcar loadout operations because they would occur inside the receiving enclosure. No further evaluation of other controls is necessary because MillerCoors selected the highest level of control efficiency.

5. Select BACT

40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators establishes a PM emission standard of 0.01 gr/dscf from any non-fugitive process except a grain dryer. The emissions inventory provided by MillerCoors in their MAQP application reflects the control efficiencies of their proposed BACT and indicates that compliance with the BACT limits would also be in compliance with the NSPS. The Department has determined that DCL discharge spouts on each of the truck, railcar, and fines loadouts that direct emissions to a baghouse is BACT for the truck, railcar, and fines loadout. Combined emissions from the truck and railcar loadout shall not exceed 0.11 lb/hr of PM and 0.09 lb/hr of PM₁₀. No

BACT limit has been established for PM_{2.5} because of the relatively low potential levels of uncontrolled PM_{2.5} and a properly operated baghouse that complies with the other PM BACT limits would have a collateral benefit of good control of PM_{2.5} emissions as well. Since the proposed baghouse would also control emissions from the fines bin, truck and railcar unloading, and headhouse and grain handling operations, and vent all of the emissions to through a common stack, the emission limits from each of the processes would be combined for compliance purposes.

While 40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators describes visible fugitive emission standards for any truck loading station as not to exceed 10% opacity, the selected PM BACT for truck and railcar loadout results in the emissions being discharged to the atmosphere via an exhaust stack. The term *fugitive emission* as defined in this subpart means the PM “which is not collected by a capture system and is released directly into the atmosphere...” Therefore, truck and railcar loadout emissions that have been collected and routed to a baghouse and released to the atmosphere via an exhaust stack are not fugitive emissions but rather point source process emissions. 40 CFR 60, Subpart DD states that any process emissions at an affected facility must not exceed 0% opacity. Since a BACT limit cannot be greater than an NSPS, BACT for visible emissions from truck and railcar loadout is that they shall not exceed 0% opacity as observed at the baghouse exhaust.

F. Haul Road

There is a 2-mile long stretch of unpaved roadway that would be used for accessing the Power Elevator. MillerCoors estimates that a daily maximum vehicle miles traveled (VMT) during the peak of harvest season would be 790 VMT/day.

1. Identify All Control Technologies

- Limiting traffic speed
- Water spray
- Chemical dust suppressant
- Paving

2. Eliminate Technically Infeasible Options

All of the proposed control options are technically feasible in this application.

3. Rank Remaining Control Technologies by Control Effectiveness

Rank	Control Technology	Control Efficiency	Source
1	Pave the surface	>90%	WRAP Fugitive Dust Handbook, September 7, 2006*
2	Apply dust suppressant	84%	WRAP Fugitive Dust Handbook, September 7, 2006*
3	Apply water	10-74%	WRAP Fugitive Dust Handbook, September 7, 2006*
4	Limit vehicle speed to 25 miles per hour (mph)	44%	WRAP Fugitive Dust Handbook, September 7, 2006*

* Western Regional Air Partnership (WRAP)

4. Evaluate the Most Effective Controls

Taking into account the different control technologies individually, paving the surface has the greatest potential control efficiency according to the WRAP Fugitive Dust Handbook at greater than 90%. MillerCoors provided a cost analysis for paving the access road based not on the maximum potential VMT that the road could experience but rather on the actual expected VMT during a year. The result was a cost per ton of pollutant reduction of \$104,877 for PM₁₀ and \$1,048,770 for PM_{2.5}. These costs are greater than what the Department would consider appropriate for the control they would provide in the given application. While using the maximum potential VMT that the road could experience would reduce the apparent cost per ton of pollutant reduction, MillerCoors proposed as an alternative the combination of applying dust suppressant and utilizing a 25 mph speed limit on the access road. These two control technologies have a combined control efficiency of $(1 - ((1 - 0.85) * (1 - 0.44))) * 100\% = 91\%$ based on the values provided in the WRAP Fugitive Dust Handbook. This level of control is comparable to the potential control efficiency from paving the surface. The cost to post and observe a speed limit and to apply periodic dust suppressant is far lower than paving the surface and results in a comparable control efficiency. Because MillerCoors has proposed a control strategy comparable to the highest control efficiency, no further evaluation of control technologies is necessary.

5. Select BACT

The Department has determined that BACT for the haul roads is applying water or chemical dust suppressant to minimize visible emissions. The Department considers water to be capable of providing an equivalent level of dust control as chemical dust suppressant while being more readily available, more cost effective, and presenting less potential environmental impact. MillerCoors has proposed an additional control strategy, which goes beyond the Department's BACT determination, of posting and adhering to a 25 mph speed limit on the access road.

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

IV. Emission Inventory

Maximum Process Rate:	20000	bushels/hr	(Maximum Process Rate)
	48	lb/bushel	(Applicant Info)
	480	tons/hr	
Maximum Hours of Operation:	8760	hrs/yr	(Continuous operation)
Maximum Process Rate:	4,204,800	TPY	

Emission Source	TPY (controlled emissions)							
	PM	PM ₁₀	PM _{2.5}	NO _x	CO	VOC	SO ₂	CO _{2e}
Truck and Railcar Receiving	0.98	0.73	0.21	--	--	--	--	--
Headhouse and Grain Handling	0.48	0.42	0.12	--	--	--	--	--
Grain Cleaning	1.58	0.41	0.07	--	--	--	--	--
Storage Bins	52.56	13.25	2.31	--	--	--	--	--
Shipping: Truck Loadout	0.48	0.36	0.10	--	--	--	--	--
Fines Bin	0.005	0.003	0.001	--	--	--	--	--
Fines Loadout	0.020	0.015	0.004	--	--	--	--	--
Haul Roads	86.04	23.23	2.32	--	--	--	--	--
Total Emissions	142.14	38.40	5.15	0.00	0.00	0.00	0.00	0

NOTES:

PM	particulate matter	CO	carbon monoxide
PM ₁₀	PM with an aerodynamic diameter of 10 microns or less	VOC	volatile organic compounds
PM _{2.5}	PM with an aerodynamic diameter of 2.5 microns or less	SO ₂	sulfur dioxide
NO _x	Oxides of nitrogen	CO _{2e}	carbon dioxide equivalent

Emission Source	TPY (controlled emissions)			
	PM	PM ₁₀	PM _{2.5}	
Truck and Railcar Receiving	0.98	0.73	0.21	
Headhouse and Grain Handling	0.48	0.42	0.12	
Shipping: Truck Loadout	0.48	0.36	0.10	
Fines Bin	0.005	0.003	0.001	
Fines Loadout	0.020	0.015	0.004	
BH#01 Total	1.96	1.52	0.44	
BH#02	BH#02 Total (Grain Cleaning)	1.58	0.41	0.07

Incoming Grain Receiving – SCC 3-02-008-02

Max Process Rate = 4,204,800 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.18 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)

PM > 10 µm Control Efficiency = 99.9% (Applicant Info)

Calculation: (4,204,800 ton/yr)*(0.18 lb/ton)*(ton/2000 lb) = 378.43 ton/yr (uncontrolled)

Calculation: ((378.43 ton/yr - 124.04 ton/yr)*(1 - 99.9%) + (0.73 ton/yr)) = 0.98 ton/yr (controlled)

PM₁₀ Emissions:

Emission Factor = 0.059 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)

PM ≤ 10 and > 2.5 µm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (4,204,800 ton/yr)*(0.059 lb/ton)*(ton/2000 lb) = 124.04 ton/yr (uncontrolled)

Calculation: ((124.04 ton/yr - 21.02 ton/yr)*(1 - 99.5%)) + (0.21 ton/yr) = 0.73 ton/yr (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.01 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)

PM ≤ 2.5 μm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (4,204,800 ton/yr)*(0.01 lb/ton)*(ton/2000 lb) = 21.02 ton/yr (uncontrolled)

Calculation: (21.02 ton/yr)*(1 - 99%) = 0.21 ton/yr (controlled)

Headhouse & Grain Handling – SCC 3-02-005-30

Max Process Rate = 4,204,800 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.061 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)

PM > 10 μm Control Efficiency = 99.9% (Applicant Info)

Calculation: (4,204,800 ton/yr)*(0.061 lb/ton)*(ton/2000 lb) = 128.25 ton/yr (uncontrolled)

Calculation: ((128.25 ton/yr - 71.48 ton/yr)*(1 - 99.9%)) + (0.42 ton/yr) = 0.48 ton/yr (controlled)

PM₁₀ Emissions:

Emission Factor = 0.034 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)

PM ≤ 10 and > 2.5 μm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (4,204,800 ton/yr)*(0.034 lb/ton)*(ton/2000 lb) = 71.48 ton/yr (uncontrolled)

Calculation: ((71.48 ton/yr - 12.19 ton/yr)*(1 - 99.5%)) + (0.12 ton/yr) = 0.42 ton/yr (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.0058 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)

PM ≤ 2.5 μm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (4,204,800 ton/yr)*(0.0058 lb/ton)*(ton/2000 lb) = 12.19 ton/yr (uncontrolled)

Calculation: (12.19 ton/yr)*(1 - 99%) = 0.12 ton/yr (controlled)

Grain Cleaning – SCC 3-02-005-03

Max Process Rate = 4,204,800 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM_{>10} Emission Factor (uncontrolled):

Total PM Emission Factor = 0.075 lb/ton (AP-42 Table 9.9.1-1, grain cleaning (cyclone controlled), 3/03)

PM>10 Emission Factor = PM_{Total} - PM₁₀ = 0.075 - 0.019 = 0.056 lb/ton (cyclone controlled)

PM > 10 μm Cyclone Control Efficiency = 90% (EPA Fact Sheet EPA-452/F-03-005)

PM > 10 μm uncontrolled = (0.056) / (1 - 90/100) = 0.56 lb/ton

PM Total uncontrolled = (PM > 10 μm) + (PM ≤ 10 μm) = 0.60 lb/ton

PM_{10-2.5} Emission Factor:

Emission Factor = 0.019 lb/ton (AP-42 Table 9.9.1-1, grain cleaning (cyclone controlled), 3/03)

PM ≤ 10 and > 2.5 μm Emission Factor = PM₁₀ - PM_{2.5} = 0.019 - 0.0032 = 0.0158 lb/ton (cyclone controlled)

PM ≤ 10 and > 2.5 μm Control Efficiency = 50% (AP-42, Appendix B.2, Table B.2-3, single cyclone)

PM ≤ 10 and > 2.5 μm uncontrolled = (0.0158) / (1 - 50/100) = 0.032 lb/ton

PM ≤ 10 uncontrolled = (PM ≤ 10 and > 2.5 μm) + (PM ≤ 2.5 μm) = 0.035 lb/ton

PM_{≤2.5} Emission Factor:

Emission Factor = 0.0032 lb/ton (AP-42 Table 9.9.1-1, grain cleaning (cyclone controlled), 3/03)

PM ≤ 2.5 μm Control Efficiency = 10% (AP-42, Appendix B.2, Table B.2-3, single cyclone)

PM ≤ 2.5 uncontrolled = (0.0032) / (1 - 10/100) = 0.004 lb/ton

PM Emissions:

Emission Factor = 0.60 lb/ton (Uncontrolled, calculated above)

PM > 10 µm Control Efficiency = 99.9% (Applicant Info)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.60 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 1,251.26 \text{ ton/yr}$ (uncontrolled)

Calculation: $((1,251.26 \text{ ton/yr} - 73.91 \text{ ton/yr}) \times (1 - 99.9\%)) + (0.41 \text{ ton/yr}) = 1.58 \text{ ton/yr}$ (controlled)

PM₁₀ Emissions:

Emission Factor = 0.035 lb/ton (Uncontrolled, calculated above)

PM ≤ 10 and > 2.5 µm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.035 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 73.91 \text{ ton/yr}$ (uncontrolled)

Calculation: $((73.91 \text{ ton/yr} - 7.48 \text{ ton/yr}) \times (1 - 99.5\%)) + (0.07 \text{ ton/yr}) = 0.41 \text{ ton/yr}$ (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.004 lb/ton (Uncontrolled, calculated above)

PM ≤ 2.5 µm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.004 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 7.48 \text{ ton/yr}$ (uncontrolled)

Calculation: $(7.48 \text{ ton/yr}) \times (1 - 99\%) = 0.07 \text{ ton/yr}$ (controlled)

Storage bin (vent) – SCC 3-02-005-40

Max Process Rate = 4,204,800 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.025 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.025 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 52.56 \text{ ton/yr}$ (uncontrolled)

PM₁₀ Emissions:

Emission Factor = 0.0063 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.0063 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 13.25 \text{ ton/yr}$ (uncontrolled)

PM_{2.5} Emissions:

Emission Factor = 0.0011 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.0011 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 2.31 \text{ ton/yr}$ (uncontrolled)

Loadout – SCC 3-02-005-60

Max Process Rate = 4,204,800 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.086 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM > 10 µm Control Efficiency = 99.9% (Applicant Info)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.086 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 180.81 \text{ ton/yr}$ (uncontrolled)

Calculation: $((180.81 \text{ ton/yr} - 60.97 \text{ ton/yr}) \times (1 - 99.9\%)) + (0.36 \text{ ton/yr}) = 0.48 \text{ ton/yr}$ (controlled)

PM₁₀ Emissions:

Emission Factor = 0.029 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM ≤ 10 and > 2.5 µm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: $(4,204,800 \text{ ton/yr}) \times (0.029 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 60.97 \text{ ton/yr}$ (uncontrolled)

Calculation: $((60.97 \text{ ton/yr} - 10.30 \text{ ton/yr}) \times (1 - 99.5\%)) + (0.10 \text{ ton/yr}) = 0.36 \text{ ton/yr}$ (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.0049 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM ≤ 2.5 μm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (4,204,800 ton/yr)*(0.0049 lb/ton)*(ton/2000 lb) = 10.30 ton/yr (uncontrolled)

Calculation: (10.30 ton/yr)*(1 - 99%) = 0.10 ton/yr (controlled)

Fines bin (vent) – SCC 3-02-005-40

Max Process Rate = 177,135 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.025 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

PM > 10 μm Control Efficiency = 99.9% (Applicant Info)

Calculation: (177,135 ton/yr)*(0.025 lb/ton)*(ton/2000 lb) = 2.21 ton/yr (uncontrolled)

Calculation: ((2.21 ton/yr - 0.56 ton/yr)*(1 - 99.9%)) + (0.003 ton/yr) = 0.005 ton/yr (controlled)

PM₁₀ Emissions:

Emission Factor = 0.0063 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

PM ≤ 10 and > 2.5 μm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (177,135 ton/yr)*(0.0063 lb/ton)*(ton/2000 lb) = 0.56 ton/yr (uncontrolled)

Calculation: ((0.56 ton/yr - 0.10 ton/yr)*(1 - 99.5%)) + (0.001 ton/yr) = 0.003 ton/yr (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.0011 lb/ton (AP-42 Table 9.9.1-1, Storage bin (vent), 3/03)

PM ≤ 2.5 μm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (177,135 ton/yr)*(0.0011 lb/ton)*(ton/2000 lb) = 0.10 ton/yr (uncontrolled)

Calculation: (0.10 ton/yr)*(1 - 99%) = 0.001 ton/yr (controlled)

Loadout – SCC 3-02-005-60

Max Process Rate = 177,135 ton/yr (Applicant Info)

Hours of operation = 8760 hr/yr

PM Emissions:

Emission Factor = 0.086 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM > 10 μm Control Efficiency = 99.9% (Applicant Info)

Calculation: (177,135 ton/yr)*(0.086 lb/ton)*(ton/2000 lb) = 7.62 ton/yr (uncontrolled)

Calculation: ((7.62 ton/yr - 2.57 ton/yr)*(1 - 99.9%)) + (0.02 ton/yr) = 0.02 ton/yr (controlled)

PM₁₀ Emissions:

Emission Factor = 0.029 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM ≤ 10 and > 2.5 μm Control Efficiency = 99.5% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (177,135 ton/yr)*(0.029 lb/ton)*(ton/2000 lb) = 2.57 ton/yr (uncontrolled)

Calculation: ((2.57 ton/yr - 0.43 ton/yr)*(1 - 99.5%)) + (0.004 ton/yr) = 0.02 ton/yr (controlled)

PM_{2.5} Emissions:

Emission Factor = 0.0049 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)

PM ≤ 2.5 μm Control Efficiency = 99% (AP-42, Appendix B.2, Table B.2-3, Fabric filter low temp)

Calculation: (177,135 ton/yr)*(0.0049 lb/ton)*(ton/2000 lb) = 0.43 ton/yr (uncontrolled)

Calculation: (0.43 ton/yr)*(1 - 99%) = 0.004 ton/yr (controlled)

Haul Roads

Vehicle Miles Traveled (VMT) per Day = 790 VMT /day (Applicant info)

VMT per hour = (790 VMT /day) / (day/24 hrs) = 32.92 VMT / hr

Hours of Operation = 8,760 hrs/yr

Precip days = 120 days/yr (from AP-42, Figure 13.2.2-1)

PM Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 9.88 \text{ lb/VMT}$

Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)

s = surface silt content = 6.4 % (Municipal Solid Waste Landfill, Table 13.2.2-3, 11/06)

W = mean vehicle weight = 37.88 tons (Applicant info)

a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)

b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)

Control Efficiency = 67.12% ((365 - 120)/365 natural mitigation)

Control Efficiency = 91% (Combined speed limit and dust suppression, WRAP Rigitive Dust Control Handbook)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (9.88 lb/VMT) * (ton/2000 lb) = 1,424.18 TPY (Uncontrolled Emissions)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (9.88 lb/VMT) * (ton/2000 lb) * (67.12/100) = 955.96 TPY (Apply natural mitigation correction)

Calculation: (955.96 TPY) * (1 - 91/100) = 86.04 TPY (Controlled Emissions)

PM₁₀ Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 2.67 \text{ lb/VMT}$

Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)

s = surface silt content = 6.4 % (Municipal Solid Waste Landfill, Table 13.2.2-3, 11/06)

W = mean vehicle weight = 37.88 tons (Applicant info)

a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)

b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)

Control Efficiency = 67.12% ((365 - 120)/365 natural mitigation)

Control Efficiency = 91% (Combined speed limit and dust suppression, WRAP Rigitive Dust Control Handbook)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (2.67 lb/VMT) * (ton/2000 lb) = 384.47 TPY (Uncontrolled Emissions)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (2.67 lb/VMT) * (ton/2000 lb) * (67.12/100) = 258.07 TPY (Apply natural mitigation correction)

Calculation: (258.07 TPY) * (1 - 91/100) = 23.23 TPY (Controlled Emissions)

PM_{2.5} Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 0.27 \text{ lb/VMT}$

Where: k = constant = 0.15 lbs/VMT (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)

s = surface silt content = 6.4 % (Municipal Solid Waste Landfill, Table 13.2.2-3, 11/06)

W = mean vehicle weight = 37.88 tons (Applicant info)

a = constant = 0.9 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)

b = constant = 0.45 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)

Control Efficiency = 67.12% ((365 - 120)/365 natural mitigation)

Control Efficiency = 91% (Combined speed limit and dust suppression, WRAP Rigitive Dust Control Handbook)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (0.27 lb/VMT) * (ton/2000 lb) = 38.45 TPY (Uncontrolled Emissions)

Calculation: (8760 hrs/yr) * (32.92 VMT / hr) * (0.27 lb/VMT) * (ton/2000 lb) * (67.12/100) = 25.81 TPY (Apply natural mitigation correction)

Calculation: (25.81 TPY) * (1 - 91/100) = 2.32 TPY (Controlled Emissions)

V. Existing Air Quality

This facility would be located in an area that is currently designated as attainment/unclassifiable for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined, based on the maximum potential emissions from this facility, that the 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.

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, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: MillerCoors LLC – Power Elevator

Montana Air Quality Permit (MAQP) Number: 4847-00

Preliminary Determination Issued: 2/14/13

Department Decision Issued: 3/6/13

Permit Final: 3/22/13

1. *Legal Description of Site:* The proposed location for the Power Elevator is at 1350 7th Road Northeast, Power, Montana. The legal location is Section 26, Township 23 North, Range 1 West, in Teton County.
2. *Description of Project:* MillerCoors LLC (MillerCoors) proposes to construct a barley storage and elevator facility with the ability to ship and receive 20,000 bushels of barley per hour and with a storage capacity of 3.4 million bushels (170 million pounds). This facility would be referred to as the Power Elevator. The facility would include two truck and one railcar unloading pits and loadout facilities for both trucks and railcars; conveyor systems; a combination aspirator/screen cleaner; eight round storage bins; a scale system; and a system for capturing materials (fines) from the cleaning process and pollution control devices.
3. *Objectives of Project:* The objectives of the project are to generate revenue from the receiving, storage, and shipment of barley.
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 air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because MillerCoors 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 #4847-00.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			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

The proposed facility would have minor, if any, effects on the terrestrial and aquatic life and habitats. The current land use is agricultural wheat farming and pastureland. Construction of the facility would require the disturbance of approximately 15 acres which would impact habitat of the disturbed area but is not expected to have any negative impact on the surrounding area. Some minor pollutant deposition could be expected during operation of the facility; however, MAQP #4847-00 contains conditions requiring the use of pollution control devices that would minimize the impacts of these potential emissions.

B. Water Quality, Quantity and Distribution

The proposed facility would have minor, if any, effects on water quality, quantity, and distribution. The facility would utilize the city water system and employ a septic system for wastewater disposal. Water has been identified as an acceptable method of dust suppression for the haul road; therefore, there could be some minor impacts experienced from its application.

C. Geology and Soil Quality, Stability and Moisture

The proposed facility would have minor, if any, effects on geology and soil quality, stability, and moisture. There would be approximately 15 acres of disturbed ground for the construction of the facility. Pollutant deposition would occur from the air emissions; however, the levels of potential emissions are small by industrial standards. Water or dust suppressant would be applied to the haul road for dust control.

D. Vegetation Cover, Quantity, and Quality

MAQP #4847-00 would contain conditions and limitations derived from rules intended to protect air quality. Deposition of particulate matter could occur; however, the impacts to vegetation cover, quantity, and quality would be expected to be minor.

E. Aesthetics

The proposed facility would have a minor impact on the aesthetics of the area. The facility would be visible and there would be intermittent noise from truck traffic and facility operations.

F. Air Quality

The proposed facility would have a minor impact on air quality. MAQP #4847-00 would contain conditions and limitations derived from rules intended to protect air quality. The facility would be small by industrial standards and the Department does not consider the potential emissions to be a threat to any ambient air quality standard.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). In this case, the search area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Search results identified one species of concern; the bird species of Horned Grebe. The Montana species rank for the Horned Grebe is S3B which indicates potentially at risk because of limited and/or declining numbers, range, and/or habitat during the breeding season. Their habitat is shallow freshwater ponds and marshes with beds of emergent vegetation. In spring and fall they are found mainly on large sized bodies of water including rivers and small lakes. The single species occurrence for the Horned Grebe is in an adjacent section to the southeast of the proposed facility location.

MillerCoors has indicated that there are two small areas of the project site that meet the biological criteria for wetlands. A jurisdictional determination has not been made for these wetlands. They may be deemed non-jurisdictional at the discretion of the United States Army Corps of Engineers (USACE) as they may be considered isolated in uplands and are not hydraulically connected. The facility would be designed in such a manner as not to disturb these wetland areas. If the wetlands are to be filled as a result of the project, a jurisdiction determination would be obtained from the USACE. Two new drainage culverts would be added, one of them under the rail tracks. Since the proposed project would not occur within an area currently designated as a wetland, it is not expected to have any more than a minor impact to any local unique endangered, fragile, or limited environmental resources.

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

The proposed facility would have a minor impact with regards to demands on environmental resources of water, air, and energy. MillerCoors intends to utilize the local power grid and domestic city water system for its energy and water needs. A septic system would be used for wastewater disposal. The source would be a minor source of air emissions.

I. Historical and Archaeological Sites

In an effort to identify an historical and archaeological sites located near the proposed facility area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there has been one previously recorded site

within the designated search locale. Site 24TT 0409 is the historic Great Northern Railroad. SHPO indicated that as long as there would be no disturbance or alteration to structures over fifty years of age, there is a low likelihood that cultural properties would be impacted and that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project then their office should be contacted and the site investigated.

J. Cumulative and Secondary Impacts

The Department determined that the impacts to the individual physical and biological considerations above to be minor. Cumulatively and secondarily, the department would expect only minor physical and biological impacts as a result of issuance of MAQP #4847-00.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			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

The proposed facility would require the disturbance of approximately 15 acres of land that is currently used for agricultural purposes. There are no known unique cultural structures or artifacts in the proposed project area. The Department expects no more than a minor impact to social structures and mores.

B. Cultural Uniqueness and Diversity

The proposed project is for the construction of a new grain elevator. Other industrial activities in the area include a fertilizer plant and other grain elevators. The community of Power is within a rural farming area. The Department expects no more than a minor impact to the cultural uniqueness and diversity of the area.

C. Local and State Tax Base and Tax Revenue

MillerCoors has indicated that the new facility would require four employees to operate. These additional jobs would be expected to have a minor impact on local and state tax base and tax revenue.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on agricultural and industrial production. The construction of the facility would require the disturbance of existing agricultural land, making it no longer suitable for its previous use. The new grain elevator would increase the industrial activity of the area related to grain receiving, storage, and shipment, as well as increased truck and rail traffic.

E. Human Health

The proposed project would be a new minor source of air emissions in the area. The Department has determined that the proposed project would comply with all applicable air quality rules, regulations, and ambient air quality standards. MAQP #4847-00 has conditions which are derived from rules intended to protect human health. The Department expects no more than minor impacts to human health.

F. Access to and Quality of Recreational and Wilderness Activities

MillerCoors stated in their application that no known recreational opportunities that would be impacted by the proposed project. The facility would be visible and would have associated noises during operation; therefore, the Department expects no more than minor impacts to any access and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

MillerCoors has stated that the Power Elevator would have four employees working at the facility. These jobs represent a minor impact on the quantity and distribution of employment.

H. Distribution of Population

The proposed project is not expected to have any impact on the distribution of population.

I. Demands for Government Services

There would be minor impacts on the demands for government services for obtaining the appropriate permits for the construction and operation of the facility. In addition, there would be ongoing compliance-related activities by the Department that would occur.

J. Industrial and Commercial Activity

There would be minor impacts to the industrial and commercial activity because this would be a new facility in the area. There would be an increase in the grain delivery, storage, and shipping activity in the area as well associated increased truck and rail traffic.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans and goals that would be affected by the issuance of MAQP #4847-00. The permit would contain conditions and limitations which would be intended to be protective of human health and the environment.

L. Cumulative and Secondary Impacts

The Department determined minor, if any, effects to the individual economic and social considerations above. Cumulatively and secondarily, the Department would expect no more than minor economic and social effects.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of the Power Elevator. MAQP #4847-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Ed Warner
Date: January 18, 2013