Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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August 17, 2011

Jerri Thibaut
EGT, LLC
30870 U.S. Hwy 87
Carter, MT 59420

Dear Mr. Thibaut:

Montana Air Quality Permit #4672-00 is deemed final as of August 17, 2011, by the Montana Department of Environmental Quality (Department). This permit is for a truck to rail grain handling elevator and associated equipment. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

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

VW:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4672-00

EGT, LLC
30870 U.S. Hwy 87
Carter, MT 59420

August 17, 2011

MONTANA AIR QUALITY PERMIT

Issued to: EGT, LLC
30870 U.S. Hwy 87
Carter, MT 59420

MAQP: #4672-00
Application Complete: 06/15/2011
Preliminary Determination Issued: 07/14/2011
Department's Decision Issued: 08/01/2011
Permit Final: 08/17/2011
AFS #: 015-0003

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to EGT, LLC (EGT), 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

EGT is proposing to install and operate a truck to rail grain handling elevator consisting of grain receiving, internal handling, and grain loadout. The facility will have a storage capacity of approximately 850,000 bushels of grain. A complete list of the permitted equipment is included in Section I.A of the permit analysis.

B. Plant Location

EGT's grain elevator facility under the subject permit is proposed to be located east of Carter, Montana on the south side of US Highway 87. The legal description of the facility is the NE ¼ of Section 31, Township 24 North, Range 7 East, Chouteau County, Montana.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. EGT 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. Receiving pit baffles, baghouse dust filter on the receiving pit and conveyor; a 3-sided shed (grain receiving).
   b. Enclosed belt conveyors as well as dust collection filters on the elevator legs (grain handling).
   c. Dust collection filters on the loadout hopper; a telescoping spout (rail loadout).
   d. A spout from the hopper located inside a 3-sided shed (truck loadout).

2. EGT shall fully enclose all conveyor systems and bucket elevators and vent the emissions to dust control equipment (ARM 17.8.749).

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

4. EGT shall handle no more than 30,000,000 bushels of grain per rolling 12-month period (ARM 17.8.749).

5. EGT shall receive by way of straight or hopper truck no more than 15,000,000 bushels of grain per rolling 12-month period (ARM 17.8.749).

6. EGT shall ship by way of truck no more than 1,000,000 bushels of grain per rolling 12-month period (ARM 17.8.749).

7. EGT shall ship by way of rail no more than 14,000,000 bushels of grain per rolling 12-month period (ARM 17.8.749).

8. EGT 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).

9. EGT shall minimize product drop height and use a telescoping loadout chute during production loadout to ensure compliance with the 20% opacity limitation in Section II.A.8 (ARM 17.8.749).

10. EGT 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).

11. EGT 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.10 (ARM 17.8.749).

B. Testing Requirements.

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

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

C. Operational Reporting Requirements

1. EGT 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).

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

5. EGT shall document, by month, the total amount of grain received at this facility. By the 25th of each month, EGT 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.5. The information for the previous months shall be submitted along with the annual emissions inventory (ARM 17.8.749).

6. EGT shall document, by month, the total amount of grain shipped by way of truck at this facility. By the 25th of each month, EGT shall total the grain shipped by way of truck for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.6. The information for the previous months shall be submitted along with the annual emissions inventory (ARM 17.8.749).

7. EGT shall document, by month, the total amount of grain shipped by way of rail at this facility. By the 25th of each month, EGT shall total the grain shipped by way of rail for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for the previous months shall be submitted along with the annual emissions inventory (ARM 17.8.749).

D. Notification

EGT 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 truck to rail grain elevator within 30 days after commencement of construction;

2. Actual start-up date of the truck to rail grain elevator within 15 days after the actual start-up; and

3. All compliance source tests, as required by the Montana Source Test Protocol and Procedures Manual.

SECTION III: General Conditions

A. Inspection – EGT shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emission Monitoring System (CEMS), Continuous Emission Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if EGT fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving EGT 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 EGT 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
EGT, LLC
MAQP #4672-00

I. Introduction/Process Description

EGT, LLC (EGT) owns and operates a truck to rail grain elevator. The facility is located east of Carter, Montana, south of US Highway 87. The legal description of the facility is the NE ¼ of Section 31, Township 24 North, Range 7 East, Chouteau County, Montana. The facility is known as EGT's Carter Grain Elevator.

A. Permitted Equipment

EGT is proposing to install and operate a truck to rail grain elevator consisting of grain receiving, internal handling, and grain loadout. The facility will have a storage capacity of approximately 850,000 bushels (bu) of grain. Equipment used at this facility includes, but is not limited to, the following:

- Grain truck receiving pit - 30,000 bushels per hour (bu/hr);
- Grain handling equipment (elevator legs & conveyors) - 30,000 - 60,000 bu/hr;
- Grain silo storage bin(s) - Four (4) 187,652 maximum bu capacity bins and two (2) 50,052 maximum bu capacity;
- Grain rail loadout equipment - 60,000 bu/hr;
- Grain truck loadout equipment - 30,000 bu/hr;
- Dust control systems - Baghouse dust filter, cartridge filter dust collector(s), and enclosure(s); and,
- Associated grain handling equipment;

B. Source Description

The proposed truck to rail grain elevator would be designed to receive grain from local farms and country elevators and then store the grain until it is shipped to market. The storage capacity of the facility would be approximately 850,000 bu.

Locally grown grains would be hauled in by truck. The trucks would be routed to the receiving building where they would be discharged into a baffled receiving pit with dust aspiration provided on the receiving pit, receiving drag conveyor and elevator leg. The aspirated dust emissions from the receiving pit and drag conveyor is ducted to the baghouse dust filter and then discharge to atmosphere. All transferring of grain through the elevator will be conveyed through enclosed belt conveyors and elevator legs. The main elevator legs will be aspirated to dust filters to reduce particulate emissions. Enclosed belt conveyors and a bucket elevator, rated at 30,000 - 60,000 bu/hr, would route the grain into storage silos, or to a bulk weigher located over the railroad track spur. An enclosed drag conveyor would be used to transport grain from below the storage silos. The grain is shipped out by either truck or railcar. Maximum allowable production at the truck to rail grain elevator is limited to 30,000,000 bu during any rolling 12-month time period.

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).

   EGT 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}

EGT 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, EGT 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). Subpart DD, Standards of Performance for Grain Elevators, indicates that grain terminal elevators that have a storage capacity of more than 2.5 million U.S. bushels are subject to the requirements of this subpart. EGT does not have a permanent storage capacity of 2.5 million bushels or more; therefore, NSPS Subpart DD does not apply 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. EGT 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; 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. EGT 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. EGT 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. EGT submitted an affidavit of publication of public notice for the June 1, 2011 issue of the *The River Press*, a newspaper of general circulation in the City of Fort Benton in Chouteau 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, which is technically practicable and economically feasible, except that Best Available Control Technology (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 EGT 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 FCAA 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), 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 #4672-00 for EGT, 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 not subject to any current NSPS.

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 EGT would be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or modified source. EGT 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.

For previously permitted sources similar to EGT, the Department has reviewed the following particulate matter control options during review of the BACT analysis.

A. Electrostatic Precipitator (ESP)

An ESP ionizes the contaminated air flowing between oppositely charged electrodes. These charged particles migrate towards the oppositely charged plates, which are eventually removed and collected at the bottom of the ESP. An ESP can handle large gas volumes and are very efficient at removing small particles with high removal efficiencies ranging from approximately 90% to 99%. While an ESP can achieve high removal efficiencies, the installation and operation costs of the ESP are considerably higher than other similar control technologies. For this reason, an ESP has not constituted BACT in previously permitted sources similar to EGT.

B. Baghouse

Fabric dust filtration equipment (baghouse) is used to collect dry particles from a gas stream. As the gas stream passes through the fabric dust filter, the dust particles are collected and retained by the fabric. A Baghouse is very efficient at removing small

particles and high particulate mass loadings, with removal efficiencies commonly ranging from 95% to 99%. A baghouse can achieve high removal efficiencies and the installation and operation costs of a baghouse are considerably less than an ESP. Therefore, the Department determined that the installation, operation, and maintenance of a baghouse constituted BACT in previously permitted sources similar to EGT.

C. Cartridge Filter

Cartridge filters perform as traditional fabric filters, where dust particles are collected and retained as the gas stream passes through a fabric media. Fitters are very efficient at removing small particles, with removal efficiencies commonly ranging from 95% to 99%. Cartridge filter are most effective in applications with lower particulate loadings. Cartridge filtration can achieve high removal efficiencies and the installation and operation costs are less than a baghouse and considerably less than an ESP. Therefore, the Department determined that the installation, operation, and maintenance of a cartridge constituted BACT in previously permitted sources similar to EGT.

A BACT analysis was submitted by EGT in permit application #4672-00, addressing some available methods of controlling PM emissions from the truck to rail grain elevator. The Department reviewed these methods, as well as previous BACT determinations to determine the appropriate BACT for this facility. In addition to the installation and operation of a baghouse, EGT proposed the use of cartridge filters to control particulate matter generated from the aspiration of grain handling operations.

Cartridge filters perform as traditional fabric filters, where dust particles are collected and retained as the gas stream passes through a fabric media. Fitters are very efficient at removing small particles, with removal efficiencies commonly ranging from 95% to 99%. Cartridge filter are most effective in applications with lower particulate loadings. Cartridge filtration can achieve high removal efficiencies and the installation and operation costs are less than a baghouse and considerably less than an ESP. EGT evaluated the following particulate matter control options for each emitting unit.

<u>Grain Receiving</u>

1. No control
2. Installation of only a 3-sided shed around the receiving pit
3. Installation of a receiving pit with baffles, a baghouse dust filter on the pit and receiving conveyor in addition to a 3-sided shed

<u>Grain Handling</u>

1. No control
2. Installation of enclosed belt conveyors only
3. Installation of enclosed belt conveyors as well as cartridge dust filters on the elevator legs

<u>Grain Rail Loadout</u>

1. Installation of a stationary spout from the hopper
2. Installation of cartridge dust filters on the loadout hopper in addition to a telescoping spout that would move based on the height of the rail car

Grain Truck Loadout

1. Installation of a spout from the hopper to load grain into a truck in a remote location with no enclosure
2. Installation of a spout from the hopper and locate this inside a 3-sided receiving shed

As a result of the evaluation of particulate matter control options, EGT selected and proposed the most stringent alternative evaluated for each emitting unit.

Based on consideration of previous BACT determinations discussed above (i.e. baghouse control) and those controls established within EGT's BACT analysis, the Department concurs with EGT's proposed BACT. The Department determined that installation, operation, and maintenance of the following emissions control methods constitute BACT:

1. Receiving pit baffles, baghouse dust filter on the pit and receiving conveyor in addition to a 3-sided shed (grain receiving).
2. Enclosed belt conveyors as well as a cartridge dust filters on the elevator legs (grain handling).
3. Cartridge dust filters on the loadout hopper in addition to a telescoping spout (rail loadout).
4. A spout from the hopper located inside a 3-sided shed (truck loadout).

IV. Emissions Inventory

	Emissions Tons/Year [PTE]					
	Facility Emissions (Non-Fugitive)					
	Uncontrolled Emissions			Controlled Emissions		
Emission Source	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Grain Receiving	37.80	12.39	2.10	7.56	2.48	0.42
Head House & Internal Grain Handling	25.62	14.28	2.44	1.28	0.71	0.12
Storage Bin Vents	10.50	2.65	0.46	10.50	2.65	0.46
Grain Shipping - Railcar Load out	5.29	0.43	0.07	3.18	0.26	0.04
Grain Shipping - Truck Load out	1.20	0.41	0.07	0.48	0.16	0.03
Total Facility Emissions ►	80.42	30.15	5.14	23.00	6.26	1.07

	Fugitive Emissions					
	Uncontrolled Emissions			Controlled Emissions		
Emission Source[(1)]	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Unpaved Roadways - Haul Roads	7.82	2.11	0.21	7.82	2.11	0.21
Paved Roadways	4.92	0.98	0.24	4.92	0.98	0.24
Total Fugitive Emissions ►	12.74	3.10	0.45	12.74	3.10	0.45

Total Facility-Wide Emissions					
Uncontrolled Emissions			Controlled Emissions		
PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
93.16	33.25	5.59	35.74	9.35	1.53

1. *Fugitive emission inventory reflects controlled emissions pursuant to federally-enforceable requirements established under ARM 17.8.308.*

PM, particulate matter
PM_{10}, particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$, particulate matter with an aerodynamic diameter of 2.5 microns or less
bu, Bushel
lbs, Pounds

EGT, LLC - Grain Handling Facility

Grain Properties: 0.028 tons/Bu
56.00 lbs/Bu

Throughput Capacity

Hourly	30,000	bu/Hour	840	tons/hour
Annual	15,000,000	bu/year	420,000	tons/year

Grain Receiving - Straight Truck [SCC 3-02-005-51]

Control Equipment: Baghouse Filter

Estimated Control Efficiency (C_e): 80 % (Capture & Removal Efficiency)

Throughput Capacity

Hourly	30,000	bu/Hour	840	tons/hour
Annual	15,000,000	bu/year	420,000	tons/year

PM Emissions:

Emission Factor	0.18 lbs/ton grain	[AP-42 Table 9.9.1-1, 3/03]	
Calculations	(0.18 lbs/ton) * (420000 tons/year) * (0.0005 lbs/ton) =	37.80	tons/year (uncontrolled)
	(37.80 tons/year) * (1 - 0.80 Ce) =	7.56	tons/year (controlled)

PM_{10} Emissions:

Emission Factor	0.059 lbs/ton grain	[AP-42 Table 9.9.1-1, 3/03]	
Calculations	(0.059 lbs/ton) * (420000 tons/year) * (0.0005 lbs/ton) =	12.39	tons/year (uncontrolled)
	(12.39 tons/year) * (1 - 0.80 Ce) =	2.48	tons/year (controlled)

$PM_{2.5}$Emissions:

Emission Factor	0.010 lbs/ton grain	[AP-42 Table 9.9.1-1, 3/03]	
Calculations	(0.01 lbs/ton) * (420000 tons/year) * (0.0005 lbs/ton) =	2.10	tons/year (uncontrolled)
	(2.10 tons/year) * (1 - 0.80 Ce) =	0.42	tons/year (controlled)

Head House and Internal Grain Handling [SCC 3-02-005-30]

Control Equipment: Cartridge Filter

Estimated Control Efficiency (C_e): 95 % (Capture & Removal Efficiency)

Throughput Capacity

Hourly	30,000	bu/Hour	840	tons/hour

Annual	30,000,000	bu/year	840,000	tons/year

PM Emissions:

Emission Factor	0.061 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.061 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	25.62	tons/year (uncontrolled)
	(25.62 tons/year) * (1 - 0.95 Ce) =	1.28	tons/year (controlled)

PM_{10} Emissions:

Emission Factor	0.034 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.034 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	14.28	tons/year (uncontrolled)
	(14.28 tons/year) * (1 - 0.95 Ce) =	0.71	tons/year (controlled)

$PM_{2.5}$Emissions:

Emission Factor	0.0058 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.0058 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	2.44	tons/year (uncontrolled)
	(2.44 tons/year) * (1 - 0.95 Ce) =	0.12	tons/year (controlled)

Storage Bin Vents [SCC 3-02-005-40]

Control Equipment: N/A

Estimated Control Efficiency (C_e): N/A

Throughput Capacity

Hourly	30,000	bu/Hour	840	tons/hour
Annual	30,000,000	bu/year	840,000	tons/year

PM Emissions:

Emission Factor	0.025 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.025 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	10.50	tons/year (uncontrolled)

PM_{10} Emissions:

Emission Factor	0.0063 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.0063 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	2.65	tons/year (uncontrolled)

$PM_{2.5}$Emissions:

Emission Factor	0.0011 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.0011 lbs/ton) * (840000 tons/year) * (0.0005 lbs/ton) =	0.46	tons/year (uncontrolled)

Grain Shipping - Railcar Loadout [SCC 3-02-005-63]

Control Equipment: Cartridge Filter

Estimated Control Efficiency (C_e): 40 % (Capture & Removal Efficiency)

Throughput Capacity

Hourly	60,000	bu/Hour	1,680	tons/hour
Annual	14,000,000	bu/year	392,000	tons/year

PM Emissions:

Emission Factor	0.027 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.027 lbs/ton) * (392000 tons/year) * (0.0005 lbs/ton) =	5.29	tons/year (uncontrolled)
	(5.29 tons/year) * (1 - 0.40 Ce) =	3.18	tons/year (controlled)

PM_{10} Emissions:

Emission Factor	0.0022 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.0022 lbs/ton) * (392000 tons/year) * (0.0005 lbs/ton) =	0.43	tons/year (uncontrolled)
	(0.43 tons/year) * (1 - 0.40 Ce) =	0.26	tons/year (controlled)

$PM_{2.5}$Emissions:

Emission Factor	0.00037 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.00037 lbs/ton) * (392000 tons/year) * (0.0005 lbs/ton) =	0.07	tons/year (uncontrolled)
	(0.07 tons/year) * (1 - 0.40 Ce) =	0.04	tons/year (controlled)

Grain Shipping - Truck Loadout [SCC 3-02-005-60]

Control Equipment: Building Enclosure

Estimated Control Efficiency (C_e): 60 % (Capture & Removal Efficiency)

Throughput Capacity:

Hourly	20,000	bu/hour	560.00	tons/hour
Annual	1,000,000	bu/year	28,000.00	tons/year

PM Emissions:

Emission Factor	0.086 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.086 lbs/ton) * (28000 tons/year) * (0.0005 lbs/ton) =	1.20	tons/year (uncontrolled)
	(1.20 tons/year) * (1 - 0.60 Ce) =	0.48	tons/year (controlled)

PM_{10} Emissions:

Emission Factor	0.0290 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.029 lbs/ton) * (28000 tons/year) * (0.0005 lbs/ton) =	0.41	tons/year (uncontrolled)
	(0.41 tons/year) * (1 - 0.60 Ce) =	0.16	tons/year (controlled)

$PM_{2.5}$Emissions:

Emission Factor	0.00490 lbs/ton grain		[AP-42 Table 9.9.1-1, 3/03]
Calculations	(0.0049 lbs/ton) * (28000 tons/year) * (0.0005 lbs/ton) =	0.07	tons/year (uncontrolled)
	(0.07 tons/year) * (1 - 0.60 Ce) =	0.03	tons/year (controlled)

Unpaved Roadways (Haul Roads)

Vehicle Miles Travelled [VMT]: 5342.28 Annual VMT

Control Method: Water Application

Control Efficiency (C_e): 50%

Emission Factor $EF = [k(s/12)^{a} * (W/3)^{b}] * ((365 - p) / 365)$ [AP-42 13.2.2.2, 11/06]

where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)

k, Empirical Constant PM =	4.9	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant PM_{10} =	1.5	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant $PM_{2.5}$ =	0.15	[AP-42 Table 13.2.2-2, 11/06]
s, Surface Material Silt Content (%) =	6.4	[AP-42 Table 13.2.2-1, 11/06]
W, Mean Vehicle Weight (tons) =	27.5	[Applicant Provided]
a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
a, Empirical Constant PM_{10} /$PM_{2.5}$ =	0.9	[AP-42 Table 13.2.2-2, 11/06]

b, Empirical Constant PM - $PM_{2.5}$ = 0.45 [AP-42 Table 13.2.2-2, 11/06]
p, Mean Precipitation Days [≥ 0.01 Inch] = 115 [AP-42 Figure 13.2.2-1, 11/06]

PM Emissions (Controlled):

Emission Factor EF = [4.9 * (6.4/12)^0.7 * (27.5/3)^0.45] * ((365 - 115) / 365) = 5.86 lbs/VMT
Calculations (5.86 lbs/VMT) * (5342.28 VMT year) * (1 - 0.50 Ce) = 15647.11 lbs/year
(15,647.11 lbs year) * (0.0005 tons/lb) = 7.82 TPY

PM_{10} Emissions (Controlled):

Emission Factor EF = [1.5 * (6.4/12)^0.9 * (27.5/3)^0.45] * ((365 -115) / 365) = 1.58 lbs/VMT
Calculations (4,224.05 lbs/VMT) * (5342.28 VMT year) * (1 - 0.50 Ce) = 4224.05 lbs/day
(4,224.05 lbs year) * (0.0005 tons/lb) = 2.11 TPY

$PM_{2.5}$ Emissions (Controlled):

Emission Factor EF = [0.15 * (6.4/12)^0.9 * (27.5/3)^0.45] * ((365 - 115) / 365) = 0.16 lbs/VMT
Calculations (0.16 lbs/VMT) * (5342.28 VMT year) = 422.41 lbs/day
(422.41 lbs year) * (0.0005 tons/lb) = 0.21 TPY

Paved Roadways:

Vehicle Miles Travelled [VMT]: 10684.66 Annual VMT
Control Method: Water Application
Control Efficiency (C_e): 50%

Emission Factor EF = [$k(sL)^{0.91} * (W)^{1.02}$] * (1-p/4N) [AP-42 13.2.1, 01/11]

where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)
k, Particle Size Multiplier PM = 0.011 [AP-42 Table 13.2.1-1, 01/11]
k, Particle Size Multiplier PM_{10} = 0.0022 [AP-42 Table 13.2.1-1, 01/11]
k, Particle Size Multiplier $PM_{2.5}$ = 0.00054 [AP-42 Table 13.2.1-1, 01/11]
sL, Mean Surface Material Silt Content [g/m2] = 7.4 [AP-42 Table 13.2.1-3, 01/11]
W, Mean Vehicle Weight [tons] = 27.5 [Applicant Provided Data]
p, Mean Precipitation Days [≥0.01 Inch] = 115 [AP-42 Figure 13.2.1-2, 01/11]

PM Emissions (Controlled):

Emission Factor [0.011 * (7.4)^0.91 * (27.5)^1.02] * (1 - 115) / (4*365) = 1.84 lbs/VMT
Calculations (1.84 lbs/VMT) * (10,684.66 VMT year) * (1 - 0.50 Ce) = 9831.35 lbs/year
(9,831.35 lbs/year) * (0.0005 tons/lb) = 4.92 TPY

PM_{10} Emissions (Controlled):

Emission Factor [0.0022 * (7.4)^0.91 * (27.5)^1.02] * (1 - 115) / (4*365) = 0.37 lbs/VMT
Calculations (0.37 lbs/VMT) * (10,684.66 VMT year) * (1 - 0.50 Ce) = 1966.27 lbs/day
(1,966.27 lbs/year) * (0.0005 tons/lb) = 0.98 TPY

$PM_{2.5}$ Emissions (Controlled):

Emission Factor	[0.00054 * (7.4)^0.91 * (27.5)^1.02] * (1 - 115) / (4*365) =	0.09	lbs/VMT
Calculations	(0.09 lbs/VMT) * (10,684.66 VMT year) * (1 - 0.50 Ce) =	482.63	lbs/day
	(482.63 lbs/year) * (0.0005 tons/lb) =	0.24	TPY

V. Existing Air Quality

EGT's Carter Grain Elevator is located in the NE ¼ of Section 31, Township 24 North, Range 7 East, Chouteau 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.

VI. Ambient Air Impact Analysis

The area surrounding the proposed facility is predominantly agricultural and rural in nature. The emissions from the proposed facility would be intermittent and seasonal in nature with generally good dispersion characteristics in the area. Therefore, in the view of the Department, the amount of controlled emissions from this facility will not cause an exceedance 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	
✓		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.

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: EGT, LLC (EGT)
Carter Grain Elevator
30870 U.S. Hwy 87
Carter, MT 59420

Montana Air Quality Permit (MAQP) Number: #4672-00
Preliminary Determination Issued: 07/14/2011
Department Decision Issued: 08/01/2011
Permit Final: 08/17/2011

1. *Legal Description of Site:* EGT's grain elevator facility under the subject permit is proposed to be located east of Carter, Montana on the south side of US Highway 87. The legal description of the facility is the NE ¼ of Section 31, Township 24 North, Range 7 East, Chouteau County, Montana.

2. *Description of Project:* EGT is proposing to install and operate a truck to rail grain elevator consisting of grain receiving, internal handling, and grain loadout. The facility will have a storage capacity of approximately 850,000 bushels of grain. A complete list of the permitted equipment is included in the permit analysis.

3. *Objectives of Project:* Increased business and revenue. The proposed facility would receive, store, and ship grain for the area farms. The proposed facility would provide area producers and local county grain elevators with a regional site for high speed loading of locally produced grains.

4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the MAQP to the proposed facility. However, the Department does not consider the "no action" alternative to be appropriate because EGT has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no action" alternative was eliminated from further consideration.

5. *A listing of mitigation, stipulations, and other controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4672-00.

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.*

Potential Physical and Biological Effects							
		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 Resource			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 project would result in increases in PM, PM_{10}, and $PM_{2.5}$ emissions. Conditions requiring control mechanisms have been placed within MAQP #4672-00 to ensure that only minor air quality impacts would occur. Additionally, limitations established within MAQP #4672-00 would minimize air pollution. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. Water Quality, Quantity, and Distribution

This permitting action would have little or no effect on the water quality, water quantity, and distribution, as there would be no discharge to groundwater or surface water associated with the completed project. For the temporary construction process, construction and industrial storm water permits would be obtained to maintain best management practices and ensure protection of water quality. A retention pond would be constructed on site for storm water runoff during and after construction. Water and sewer services are available, therefore eliminating the need for additional surface or groundwater use. Minor pollutant deposition on surface waters near the project area may occur. Therefore, the project would have minor, if any, impacts to water quality, quantity or distribution in the area.

C. Geology and Soil Quality, Stability, and Moisture

This permitting action would have a minor effect on geology and soil properties with land disturbances associated with construction of the facility. Approximately 56 acres would be disturbed. PM, PM_{10}, and $PM_{2.5}$ emissions from this project may have a minor effect on the soil quality; however, the air quality permit associated with this project would contain limitations and conditions to minimize the effect of the emissions on the surrounding environment. The Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere, and conditions that would be placed in MAQP #4672-00.

D. Vegetation Cover, Quantity, and Quality

The proposed project would have minor impacts on the surrounding vegetation because of construction of the facility. The existing surrounding land is currently agricultural in nature. The PM, PM_{10}, and $PM_{2.5}$ emissions from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment. Overall, this project would have minor effects on the vegetation cover, quantity and quality.

E. Aesthetics

Construction of the truck to rail grain elevator would have minor impacts on the surrounding property from both the visual perspective, as well as noise pollution. The facility is proposed to be constructed within an area that is predominately of agricultural or undeveloped land use. The Department determined minor changes in the aesthetic value of the site would be experienced as the land use would be altered.

F. Air Quality

The air quality of the area would realize minor impacts from the proposed project because the facility would emit the following air pollutants: PM, PM_{10}, and $PM_{2.5}$. These emissions would be minimized by limitations and conditions that would be included in MAQP #4672-00. While deposition of pollutants would occur as a result of operating the facility, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #4672-00. The air concentration of pollutants would be relatively small, and the corresponding deposition of those air pollutants would be minor.

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 area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Search results concluded that a single vertebrate animal was identified; The Ferruginous Hawk was listed with a sensitive status by the U.S. Bureau of Land Management. Because minor emissions and disturbance of the property and surroundings are anticipated, the Department has determined that there will be a minor disturbance to unique, endangered, fragile, or limited environmental resources in the area.

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

The proposed project would have minor impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be minor. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the proposed facility would be minor.

The proposed project would be expected to have minor impacts on the demand for the environmental resource of energy because power would be required at the site. The impact on the demand for the environmental resource of energy would be minor because the facility would be relatively small by industrial standards. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites located near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there have been no previously recorded sites within the project vicinity. SHPO stated that there is a low likelihood cultural properties will be impacted. Therefore, the Department determined that the chance of the project impacting any historical and archaeological sites in the area would be minor.

J. Cumulative and Secondary Impacts

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would cause a slight increase in emissions of PM, PM_{10}, and $PM_{2.5}$ in the proposed area. However, conditions have been placed in MAQP #4672-00 to ensure that only minor air quality impacts would occur. Limitations would be established in the permit to minimize air pollution. Overall, any impacts to the physical and biological environment would be minor.

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

Potential Social and Economic Effects

		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 SOCIAL AND ECONOMIC EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not cause disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project is located in a moderately remote area predominately used for agricultural purposes. The proposed project would not change the predominant use of the surrounding area and the facility would be relatively small by industrial standards.

B. Cultural Uniqueness and Diversity

Only minor impacts to the cultural uniqueness and diversity of the area would be anticipated as the location is moderately remote and land use will remain for agricultural purposes. Operation of the truck to rail grain elevator would require employment of four to five employees, which is not likely to cause a significant immigration of new people to the area for employment purposes. In addition, based on previous cultural resource inventories in the area, SHPO stated that there is a low likelihood cultural properties will be impacted. Therefore, the cultural uniqueness and diversity of the area would not likely be affected.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor impacts to the local and state tax base and tax revenue as a result of the proposed project. However, the proposed project would necessitate negligible construction activities and typically would not require an extended period of time for completion. Therefore, any construction related jobs would be temporary and any corresponding impacts on the tax base/revenue in the area would be minor. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

The land at the proposed location is currently used for agricultural purposes. The proposed project would have a minor impact on agricultural production as area farmers would have access to a local facility to receive, store, and ship their grain products. The proposed project would result in minor impacts to industrial production because the proposed project would be a new industrial source. However, because the facility would be relatively small by industrial standards, only minor impacts to industrial production would be expected.

E. Human Health

The proposed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would be implemented within an area currently utilized for agricultural purposes. No impacts to access and quality of recreational and wilderness activities in the project area are anticipated.

G. Quantity and Distribution of Employment

The proposed project would have minor impacts on the quantity and distribution of employment as four to five employees would be hired as a result of the proposed project. Additionally, temporary construction-related positions could result from this project. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the facility.

H. Distribution of Population

The proposed project would have minor impacts on the employment and population of the area as four to five employees would be required for normal operations. Additionally, temporary construction-related positions would result from this project. However, any

impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the facility and the relatively short time period that would be required for constructing the facility. Overall, any impacts to the distribution of population in the area would be minor.

I. Demands of Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #4672-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #4672-00. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on local industrial and commercial activity because the proposed project would represent only a minor increase in the industrial and commercial activity in the area. The proposed project would be relatively small and would take place at a moderately remote location.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #4672-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4672-00.

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 a truck to rail grain elevator. MAQP #4672-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there are no major or unknown effects associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program and the Montana Historical Society.

Individuals or groups contributing to this EA: Montana Department of Environmental Quality, Montana Natural Heritage Program, Montana Historical Society.

EA prepared by: D. Kuenzli
Date: June 24, 2011