DEQ
Montana Department
of Environmental Quality

March 11, 2016

Charley Kubler
CHS, Inc.- Big Sky -Kershaw
37525 Highway 87
Fort Benton, MT 59442

Dear Mr. Kubler:

Montana Air Quality Permit #5154-00 is deemed final as of 3/11/2016, by the Department of Environmental Quality (Department). This permit is for a dry fertilizer plant. 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 Quality Bureau
(406) 444-3626

Loni Patterson
Environmental Engineer
Air Quality Bureau
(406) 444-1452

JM:LP
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #5154-00

CHS, Inc.- Big Sky-Kershaw
37525 Highway 87
Fort Benton, MT 59442

March 11, 2016

MONTANA AIR QUALITY PERMIT

Issued to: CHS, Inc.
37252 Highway 87
Fort Benton, MT 59442

MAQP: #5154-00
Application Complete: 12/16/2015
Preliminary Determination Issued: 1/22/2016
Department's Decision Issued: 2/24/2016
Permit Final: 3/11/2016
AFS #: 015-0005

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to CHS, Inc. (CHS) 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

CHS proposes to construct and operate a dry fertilizer blending and storage facility and associated equipment with a 50,000 tons annual throughput limit. A complete list of the permitted equipment may be found in Section I.A of the Permit Analysis.

B. Plant Location

CHS is proposing to operate a dry fertilizer storage and blending facility that will be located at SE ¼ NW ¼ Section 29, Township 24 N, Range 8 E, Chouteau County, Montana.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. The operation of the dry fertilizer storage and blending facility shall not exceed the 50,000 tons of material throughput during rolling 12-month time period (ARM 17.8.749, ARM 17.8.1204).

2. All visible emissions from equipment shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304).

3. CHS shall use enclosed equipment for mixing and handling activities including the corresponding elevator legs, and conveyors inside the building to minimize airborne particulate matter and to maintain compliance with opacity limitations in Section II.A.2 (ARM 17.8.752).

4. All truck loading will be conducted inside a building to minimize airborne particulate matter and maintain compliance with opacity limitations in Section II.A.2 (ARM 17.8.752).

5. CHS shall use best practices to reduce the drop distance from the railcar bottoms to grate and the from hopper truck to grate to minimize particulate emissions (ARM 17.8.752).

6. CHS shall install and use a telescopic loadout spout from the hopper discharge to the truck to minimize drop distance and particulate emissions (ARM 17.8.752).

7. CHS 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).

8. CHS shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.8 (ARM 17.8.752).

9. CHS shall limit the speed of the trucks entering and exiting the facility to 15 mph to maintain compliance with the reasonable precaution limitation in Section II.A.7 (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. CHS shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM17.8.505). CHS shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

   - Annual throughput.

2. CHS 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. CHS shall maintain on-site records showing daily hours of operation and daily throughput rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by CHS as a permanent business record for at least five 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. CHS shall document, by month, the total throughput for the plant. By the 25th day of each month, CHS shall total the dry fertilizer throughput for the plant for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

5. CHS shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

1. Within 15 days of the actual start-up date of any equipment, CHS shall submit written notification of the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

SECTION III: General Conditions

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

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving CHS of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, 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 permitted source.

G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by CHS 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 three years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. CHS shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
CHS, Inc. Big Sky-Kershaw
MAQP #5154-00

I. Introduction/Process Description

CHS, Inc. (CHS) proposes to install and operate a dry fertilizer storage and blending facility with 25,000 tons of bulk storage, 300 tons of micronutrient storage, 1,200 tons per hour (TPH) railcar and truck receiving capabilities, a truck load-out system along and associated equipment. The facility has an annual throughput limit of 50,000 tons.

A. Permitted Equipment

The following list of permitted equipment is provided for reference as MAQP #5154-00 is written de minimis friendly whereby operational flexibility is provided so that alternate equipment may be utilized as long as maximum permitted capacities are not exceeded. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action includes, but is not limited to the following:

- Dry fertilizer receiving, railcar capacity 1,200 TPH
- Dry fertilizer receiving, truck capacity 1,200 TPH
- Dry fertilizer mixing and handling capacity 25,000 tons bulk storage, 300 tons of micronutrient storage, mixing rate is 300 TPH
- Dry fertilizer shipping, trucks, 250 TPH
- Associated equipment: elevator, conveyors, blending system, tower, spouting, etc.

B. Source Description

The CHS's dry fertilizer storage and blending facility that will be located at SE ¼ NW ¼ Section 29 Township 24 N Range 8 E, Chouteau County, Montana.

Railcars and/or trucks will deliver dry fertilizer products to the dry fertilizer receiving pits for discharge. After being discharged into the respective receiving pit, the dry fertilizer will be transferred to storage bins by means of a receiving conveyor, elevator leg and a belt conveyor. Dry fertilizer will be gravity dropped into storage bins (approximately six bulk storage bins and three micronutrient bins). The majority of the dry fertilizer delivered is expected to be received by railcar.

During mixing operations and formulations, dry fertilizer will be removed from the various storage bins and placed into the boot hopper using a front end loader. The dry fertilizer in the boot hopper will then be transported to either a conditioner or onto a conveyor that takes the dry fertilizer to a fill leg. From the fill leg, the dry fertilizer will either be transported to a blend tower or will be transferred to a conveyor over the micro-nutrients for gravity placement into a micronutrient storage bin. The blend tower will have a distributor and a number of holding bins. Dry fertilizer in the blend tower is then transferred to a weigh hopper and then to one of two eighteen ton blenders. After the dry fertilizer has been blended it is transferred into a holding hopper.

The dry fertilizer in the holding hopper is then transported through one of the shipping spouts for discharge into waiting trucks. Telescoping chutes will be used to minimize particulate matter emissions inside the building during truck loading. All truck loading activities will occur inside the building.

Dry fertilizer receiving activities will be conducted utilizing either railcars and/or trucks. All dry fertilizer products will be shipped out by truck. There are no planned railcar shipping capabilities for the site. The facility will use unpaved haul roads to receive and ship dry fertilizer products by truck. The unpaved roadways will be constructed with densely packed heavy duty gravel. The facility will employ best management practices, such as dust suppression and speed controls, to reduce fugitive particulate matter emissions from the gravel roads.

C. Response to Public Comments

Person/Group Commenting	Permit Reference	Comment	Department Response
CHS, Inc, Brian Duffy	Section II. A.3	Please reword this paragraph to include the wording "the corresponding" to read as "mixing and handling activities including the corresponding elevator legs, and conveyors". This additional wording in the sentence would clarify that this applies to the specific elevators and conveyors located inside the dry fertilizer building near the top which distributes the dry fertilizers amongst the various storage bins. This belt conveyor, which is inside the building itself, cannot be fully enclosed due to its operational requirements and functionalities. Note that the enclosures can include subsurface tunnels. Note that enclosures can include placement in subsurface tunnels.	Language for Section II.A.3 has been updated to include "the corresponding".

Person/Group Commenting	Permit Reference	Comment	Department Response
CHS, Inc., Brian Duffy	Section II.A.10	Please remove or clarify this specific condition as it appears to limit the facility-wide production to 250 tons per year. Condition 1 already contains a restriction limiting annual throughput to 50,000 tons over a rolling 12-month period.	The condition limiting any other equipment owned or operated by CHS, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period applies to portable source where two separate permitted source may be operating at the same site, this would limit emissions to 250 tons. This does not apply to this facility as it is a stationary source and all equipment is permitted under this MAQP #5154-00. The condition was removed.

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 locations of complete copies of all applicable rules and regulations 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).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 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 PM_{10}
11. ARM 17.8.230 Fluoride in Forage

CHS 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 six 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 shall be taken to control emissions of airborne particulate matter. (2) Under this rule, CHS shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

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

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank tuck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). CHS is not considered an NSPS affected facility under 40 CFR Part 60 and is not subject to the requirements.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. CHS is not considered a NESHAP-affected facility under 40 CFR Part 63 and is not subject to the requirements.

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. CHS 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.

   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 modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. CHS has a PTE greater than 25 tons per year of particulate matter (PM), PM with an aerodynamic diameter of 10 micros or less (PM_{10}), and PM with an aerodynamic diameter of 2.5 microns 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. CHS 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. CHS submitted an affidavit of publication of public notice for the December 9, 2015, issue of the *River Press*., a newspaper of general circulation in the town 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 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 CHS 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 one year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than one year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

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

   This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 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 stationary 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5154-00 for CHS, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

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

   c. This source is not located in a serious PM_{10} nonattainment area.

   d. This facility is not subject to current NSPS.

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

   f. This source is not a Title IV affected source

   g. This source is not a solid waste combustion unit.

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

   CHS requested federally-enforceable permit limitations to avoid the Title V program. The source is a synthetic minor source of emissions with respect to Title V. The Department determined that this facility is not subject to the Title V Operating Permit Program.

   i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

      i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.

      ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3)(a) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. CHS shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

Process and Fugitive Particulate Emissions

Process Particulate Emissions

The Department reviewed relevant control options. The following control options were reviewed by the Department in order to make the following BACT determinations:

- Electrostatic Precipitator (ESP)
- Fabric Filter Baghouse
- Enclosed Equipment/Building and Minimizing Drop Distance During Loading and Unloading Activities

An ESP ionizes the contaminated air flowing between oppositely charged electrodes. The charged particles migrate toward the oppositely charge 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. The installation, operation and maintenance cost of an ESP are significantly higher than other control technologies and best management practices. There are also corresponding energy and environmental impacts associated with the operation of an ESP. For those reason, the Department did not select ESP as BACT.

Fabric filter baghouse equipment (baghouse) is used to collect dry particles from a gas stream. As the gas stream passes through the fabric at removing small particles and high particulate mass loadings, with removal efficiencies in excess of 99%. The construction, installation and operation of a baghouse for the control of a small amount of particulate matter emissions would not be cost effective, especially due to the seasonal nature of operations. There are also energy and environmental impacts that would result relative to the small quantity of particulate matter removed by a baghouse. The Department did not select the baghouse as BACT.

The use of enclosed equipment and building for receiving, handling, mixing and loading activities serves to isolate these activities from emission and wind disturbance that could generate more airborne dust during transfer activities. The control efficiencies of the enclosures around the conveyors and legs are up to 99%. It is also estimated that the control efficiency associated with conducting handling/mixing and load-out activities inside the building is up to 70%.

The use of enclosed conveyor and leg system with a reduced drop distance will minimize particulate emissions indoors. The loading, unloading and handling will happened inside of an enclosed building which will also minimize atmospheric particulate emissions. The blending equipment will be an enclosed system within the building.

For receiving activities, CHS will use best practices to minimize the drop distance from the hopper truck bottoms or railcar bottoms to the receiving grates. During truck loading, the installation and use of a telescopic loadout spout from the hopper discharge to the truck is required to minimize the drop distance.

All of the listed technologies are deemed technically feasible for this facility. The potential to emit amount for the process equipment is very small therefore the consideration of the ESP and fabric filter baghouse would be an economic burden for very little particulate removal. The Department selects the enclosed equipment and building as BACT for this source.

Fugitive Particulate Emissions

CHS must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, parking lots or the general plants are with water, as necessary. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation itself. However, because water is more readily available, is more cost effective, is often equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions. Using water to comply with the reasonable precaution limitation will be considered BACT.

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

IV. Emission Inventory

Annual Throughput Limit= 50,000 tons

CONTROLLED	tons/year [a]		
Emission Source	**PM**	**PM_{10}**	**$PM_{2.5}$**
Receiving	1	1	1
Blending and Handling	1	1	1
Loadout	0.5	0.5	0.5
Haul Roads	14.47	4.54	0.45
Total Annual Emissions	16.97	7.04	2.95

Footnotes:

a. Inventory reflects enforceable limits on annual throughput and controlled fugitive emissions.

Receiving

rail	1200	tph	facility provided information
truck	1200	tph	facility provided information
total receiving	2400	tph	
annual limitation	50000	tpy	permitted limitation

rail receiving

rail	1200	tph	
annual limitation	50000	tpy	
Emission factor	0.02	lb/ton	EPA Criteria Pollutant Emission Factors for the 1985 Emissions Inventory, Bulk Loading of Urea

uncontrolled PM emissions 0.5 tons/year

truck receiving

truck	1200	tph	
annual limitation	50000	tpy	
Emission factor	0.02	lb/ton	EPA Criteria Pollutant Emission Factors for the 1985 Emissions Inventory, Bulk Loading of Urea

uncontrolled PM emissions 0.5 tons/year

total receiving PM emissions 1 tons/year

***Conservative assumption $PM=PM_{10}=PM_{2.5}$

Dry fertilizer mixing and handling

permit annual limited throughput 50000tons per year Requested by CHS

PM			
Emission Factor	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
Internal handling multiplier	2		
total annual emissions	1	tpy	
PM_{10}			
Emission Factor	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
Internal handling multiplier	2		
total annual emissions	1	tpy	
$PM_{2.5}$			
Emission Factor	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
Internal handling multiplier	2		
total annual emissions	**1**	**tpy**	

Dry Fertilizer Shipping (truck)

Hourly throughput	250	tph	
Permitted Annual Throughput	50000	tph	
PM			
Emission factor (EF)	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
annual emission	0.5	tpy	
PM_{10}			
Emission factor (EF)	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
annual emission	0.5	tpy	
$PM_{2.5}$			
Emission factor (EF)	0.02	lb/ton	EPAs Criteria Pollutant Emission Factors for the 1985 NAPAP Emission Inventory; Bulk loading for Urea.
annual emission	0.5	tpy	

Haul Roads-- Receiving

Vehicle Miles Traveled (VMT) per Day = 240 VMT/day based on facility provided information	240	VMT/day
VMT per hour = (240 VMT/day) * (day/24 hrs) = 10.00 VMT/hr based on facility provided information	10.00	VMT/hr
VMT per year=	2,000.00	VMT/year
Hours of Operation = 42 hrs/yr	42	hrs/yr
trucks per year	2,000	trucks/year
Annual Throughput Limitations	50,000	tons/year
Roundtrip length- empty	2,078	feet
Roundtrip length- full	3,202	feet
truck capacity	25	tons

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 = 15.04 lb/VMT	15.04	lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	4.9	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30.2	tons
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.7	
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.45	
P = 90days (Value from AP 42, Figure 13.2.2-1 Mean number of days with .01 inch or more of precipitation in US 11/06)	90.00	days
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (2,000.00 VMT/year) * (15.04 lb/VMT) * (ton/2000 lb) = 15.04 tons/yr (Uncontrolled Emissions)	**15.04**	tons/yr
Calculation: (15.04 tons/yr) * (1-50/100) = 7.52 tons/yr (Controlled with water spray or chemical dust suppressant)	**7.52**	tons/yr

PM_{10} 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 = 4.71 lb/VMT	4.71	lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	1.5	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (15.0418552626999 lb/VMT) * (4.71 lb/VMT) * (ton/2000 lb) = 4.71 tons/yr (Uncontrolled Emissions)	**4.71**	tons/yr
Calculation: (15.0418552626999 lb/VMT) * (0.00) * (4.71 lb/VMT) * (ton/2000 lb) * (1-50/100) = 2.36 tons/yr (Apply 50% control efficiency)	**2.36**	tons/yr

$PM_{2.5}$ 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 = 0.47 lb/VMT	0.47	lb/VMT
Where: k = constant = 0.15 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.15	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (15.0418552626999 lb/VMT) * (0.47 lb/VMT) * (ton/2000 lb) = 0.47 tons/yr (Uncontrolled Emissions)	**0.47**	tons/yr
Calculation: (15.0418552626999 lb/VMT) * (0.00) * (0.47 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.24 tons/yr (Apply 50% control efficiency)	**0.24**	tons/yr

Haul Roads-- Shipping

Vehicle Miles Traveled (VMT) per Day = 240 VMT/day based on facility provided information	240	VMT/day
VMT per hour = (240 VMT/day) * (day/24 hrs) = 10.00 VMT/hr based on facility provided information	10.00	VMT/hr
VMT per year=	1,848.11	VMT/year
Hours of Operation = 42 hrs/yr	42	hrs/yr
trucks per year	2,000	trucks/year
Annual Throughput Limitations	50,000	tons/year
Roundtrip length- empty	2,929	feet
Roundtrip length- full	1,950	feet
truck capacity	25	tons

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 = 15.04 lb/VMT	15.04	lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	4.9	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30.2	tons
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.7	
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.45	
P = 90days (Value from AP 42, Figure 13.2.2-1 Mean number of days with .01 inch or more of precipitation in US 11/06)	90.00	days
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (2,000.00 VMT/year) * (15.04 lb/VMT) * (ton/2000 lb) = 13.90 tons/yr (Uncontrolled Emissions)	**13.90**	tons/yr
Calculation: (13.90 tons/yr) * (1-50/100) = 6.95 tons/yr (Controlled with water spray or chemical dust suppressant)	**6.95**	tons/yr

PM_{10} 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 = 4.71 lb/VMT	4.71	lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	1.5	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (15.0418552626999 lb/VMT) * (4.71 lb/VMT) * (ton/2000 lb) = 4.36 tons/yr (Uncontrolled Emissions)	**4.36**	tons/yr
Calculation: (15.0418552626999 lb/VMT) * (0.00) * (4.71 lb/VMT) * (ton/2000 lb) * (1-50/100) = 2.18 tons/yr (Apply 50% control efficiency)	**2.18**	tons/yr

$PM_{2.5}$ 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 = 0.47 lb/VMT	0.47	lb/VMT
Where: k = constant = 0.15 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.15	lbs/VMT
s = surface silt content = 13.5 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	13.5	%
W = mean vehicle weight = 30.2 tons (facility provided information)	30	tons
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
Control Efficiency = 50% (Water spray or chemical dust suppressant)	50	%
Calculation: (15.0418552626999 lb/VMT) * (0.47 lb/VMT) * (ton/2000 lb) = 0.44 tons/yr (Uncontrolled Emissions)	**0.44**	tons/yr
Calculation: (15.0418552626999 lb/VMT) * (0.00) * (0.47 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.22 tons/yr (Apply 50% control efficiency)	**0.22**	tons/yr

V. Existing Air Quality

This permit is for a stationary facility to be located in SE ¼ NW ¼ Section 29, Township 24 N, Range 8 E in Chouteau County, Montana. Madison County, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a stationary source that would operate on an intermittent and seasonal basis, so any effects to air quality will be minor and of limited duration.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5154-00, the Department determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

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 Quality Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: CHS, Inc. Big Sky-Kershaw
37252 Highway 87
Fort Benton, MT 59442

Montana Air Quality Permit number (MAQP): 5154-00
Preliminary Determination Issued: January 22, 2016
Department Decision Issued: February 24, 2016
Permit Final: March 11, 2016

1. *Legal Description of Site*: CHS, Inc. (CHS) proposes to install and operate a dry fertilizer blending and storage facility located at SE ¼ NW ¼ Section 29, Township 24N, Range 8E, Chouteau County, MT.

2. *Description of Project*: CHS would operate a dry fertilizer blending and storage facility would utilize railcar, trucks, conveyors and legs to transfer the fertilizer to, from and throughout the facility. The surrounding area is mostly agricultural with the Missouri River approximately one mile to the east. The land around the river is agricultural. There is a grain elevator owned by CHS adjacent to the proposed site.

3. *Objectives of Project*: The objective of this project would be to produce revenue for CHS through the sale and use of dry fertilizer. This would allow farmers in the area to obtain fertilizer closer to the farms they maintain. The issuance of the permit would allow CHS to operate the permitted equipment at the site location.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. This would mean that the fertilizer for purchase would be a longer distance to the farms. The railroad line already existing would be used less and there would be less truck traffic to and from the site on Highway 87. Other alternatives considered are outlined in Section III of Montana Air Quality Permit Analysis.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5154-00.

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 permitting action would be expected to have minor effect terrestrial and aquatic life and habitats, as the proposed location is within an existing agricultural site. The air emissions would likely only have minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of the operation (see Section 7.F of this EA) and would have seasonal operations. The Department recognizes that the location is near a Greater Sage-Grouse general habitat area as defined by Executive Order No. 12-2015. The application for this project was received before the Executive Order effective date of 1/1/2016 and therefore is not subject to the Executive Order No. 12-2015. The site will be about one mile from the Greater Sage-Grouse general habitat area.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the processing equipment and surrounding facility areas, including haul roads. This water use would be expected to only cause minor, if any, impacts to water resources because the facility has a low level of potential emissions and water would be required to be used only to suppress particulate emissions. The project includes the installation of a water quality pond with a culvert outlet and an emergency overflow rip rap, rip rap at culvert outlets for energy dissipation and vegetated swales. In addition, the facility would emit air pollutants and corresponding deposition of pollutants would occur, as described in Section 7.F. The Department determined that due to dispersion characteristics of pollutants and other conditions that would be placed in MAQP #5154-00, any impacts from deposition of pollutants on water quality, quantity, and distribution expected would be minor.

C. Geology and Soil Quality, Stability and Moisture

The project will import several thousand cubic yards for structural fill under the rail and roadway sections. The fill be taken from a nearby pit. The existing soil will be wasted onsite in embankments or permanent storage piles. Minor impacts from deposition of air pollutants on soils would likely result (as described in Section 7.F) and water would be used for pollution control ,only as necessary, to control airborne particulate emissions. Minimal water runoff would likely occur. Since only minor amount of pollution would be expected and corresponding emission would be widely dispersed before settling upon the surrounding soils and vegetation (Section 7.D), impacts would be minor. Therefore, any effects upon geology and soil quality, stability and moisture from air pollutant emission from equipment operations would likely minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would be expected to occur with respect to vegetative cover, quality and quantity. The facility would likely be relatively minor source of emission and pollutants widely dispersed (Section 7.F) during operations. Deposition on vegetation from the proposed project would expect to minor. Corresponding vegetative impact would likely minor due to limited water usage (Section 7.F) and minimal associate soil disturbance from the application of water and water runoff (Section 7.B).

E. Aesthetics

The permitted equipment would be located on a property of 9.3 acres. Activity within the facility would create noise while operating at the proposed site. The application states the nearest home is 0.32 mile from the initial proposed project site. Visual and noise impacts would be minor and short-lived. The area around the site is agricultural.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be relatively small and operate on a seasonal basis. MAQP#5154-00 includes conditions requiring reasonable precautions to minimize particulate emissions and to limit the facility's productions capacity. The limitations to the production capacity reduce the potential to emit to below the major source threshold level of 100 tons per year (tpy) for any pollutant. Pollutant deposition from the facility would expect to be minimal because the pollutants emitted are widely dispersed (from factors such as wind speed and wind direction) and exhibit minimal deposition on the surrounding area. Therefore, air quality impacts from operating the dry fertilizer blending and storage facility in the area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Natural Resource Information System-Montana Natural Heritage Program in an effort to assess any potential impacts to any unique endangered, fragile or limited environmental requires in the initial proposed area of operation. The eight species of concern: Great Blue Heron, Greater Sage-Grouse, Pallid Sturgeon, Sturgeon Chub, Blue Sucker, Sauger, Spiny Softshell, Greater Short-horned Lizard. The area considered is defined by the section, township and range of the proposed site, with an additional one mile buffer.

The Department recognizes that the location is near a Greater Sage-Grouse general habitat area. The application for this project was received before the Executive Order No. 12-2015 effective date of 1/1/2016 and therefore is not subject to the Executive Order. The site will be about one mile from the Greater Sage-Grouse general habitat area.

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

Due to the relatively small size of the project, only small demand on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emission being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with seasonal operations and air pollutants generated by the facility would be widely dispersed as described in Section 7.F. Energy requirements would also be small, as the facility would only operate 42 hours per year. Impacts of water, air and energy resources would likely be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society State Prevention Office (SHPO) in an effort to identity any historical and/or archaeological sites that may be present in the proposed area of construction and operation. According to SHPO records, there has been no previously recorded historic site within the designated search locale. The absence of cultural properties in the area does not mean that they do not exist, but rather may reflect the absence of any previous cultural resource inventory in the area, as SHPO records indicate none.

State Historical Preservation Office maintains the position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, they would recommend that they be recorded and a determination of their eligibility be made. As long as there would be no disturbance or alternation to structures over fifty years of age, SHPO states there is a low likelihood cultural properties will be impacted.

J. Cumulative and Secondary Impacts

The operation of the proposed project would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environmental because the facility would generate air emissions. Noise would be generated from the site. Emissions and noise would cause minimal disturbance as the facility would be expected to operate in areas designated and used for such operations on a seasonal basis. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP#5154-00. Overall, any cumulative and/secondary impacts to the physical and biological aspects of the human environment would be minor.

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 operation of the proposed project would be expected to cause minor disruption to the social structures and mores in the area because the source would be a minor industrial source in a relatively remote location. The facility would only have seasonal operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP#5154-00. Therefore, the existing social structures and mores would have minor effects as a result of the permitting action.

B. Cultural Uniqueness and Diversity

The impact to cultural uniqueness and diversity of the area would be minor. The site will be located in an area that is an existing agricultural site owned by CHS and adjacent to a grain elevator. The surrounding land is agricultural. The Department determined that there would be minor effects to cultural uniqueness and diversity.

C. Local and State Tax Base and Tax Revenue

The proposed project would have little, if any impact on the local and state tax base and tax revenue. The facility would be a minor industrial source of emissions and would have seasonal operations. Thus, only minor impacts to local and state tax base and revenue would be expected from the employees and facility production.

D. Agricultural or Industrial Production

The operation of the proposed project would have only a minor impact on local agricultural production since the facility would be a minor source of air emission (by agricultural standards). There would be minimal air pollution deposition on the surrounding land (as described in Section 7.F), only minor and temporary effects on the surrounding vegetation would occur. The facility operations would be seasonal and would be permitted with operational conditions that would minimize impacts upon surrounding vegetation, as described in Section 7.D.

E. Human Health

MAQP#5154-00 would incorporate conditions to ensure the dry fertilizer storage and blending facility would operate in compliance will all applicable air quality rules and standards. These rules and standards are designed to be protective in regards to human health. As described in Section 7.F, the air emissions from the facility would be minimized by the use of water spray and other conditions established in MAQP#5154-00.

F. Access to and Quality of Recreational and Wilderness Activities

Based on the information received from CHS, no recreational activities or wilderness areas are near the proposed project site. No access to the public is available on the land privately owned by CHS where the proposed project would be located.

G. Quantity and Distribution of Employment

The facility would only require 10 employees to operate and would have seasonal operations. The operation would not be expected to have long-term impacts upon the quantity and distribution of employment in the area.

H. Distribution of Population

No individuals would be expected to permanently relocate to this area as a result of operating the facility.

I. Demands for Government Services

There would be increased heavy truck and railroad traffic to and from the site. Government services would be required for acquiring the appropriate permits from governmental agencies. Demand for government services would be minor.

J. Industrial and Commercial Activity

The operation would represent only a minor increase in the industrial/agricultural activity in the proposed area of operation. Limited additional industrial, agricultural or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Executive Order No. 12-2015 applies to projects initiated beginning January 1, 2016. As this application was received before that date, the Executive Order does not specifically apply to this permit action. Although the Executive Order was not developed locally, it will have local implications for projects located in Connectivity Areas, Core Areas and General Habitat Areas. The Greater Sage-Grouse general habitat boundary is adjacent to the project site section but since the project site is outside the boundary, will not likely be subject to the Executive Order in the future. The boundary is approximately one mile from the current project site. If the site were to expand, or have impacts such as requiring road construction into the General Habitat Area, it may be subject to the Executive Order in the future.

L. Cumulative and Secondary Impacts

The operation of the facility would cause only minor cumulative and secondary impacts to the social economic aspects of the human environment in the immediate area of operation because the source would be a minor source of emissions. Minor economic impacts to the local economy would be expected from operating the facility because the source is relatively small and operates seasonally. Only minor cumulative effects would be expected to the local social structure and economy.

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

The current permitting action is for the dry fertilizer blending and storage facility. MAQP #5154-00 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, Montana Sage Grouse Oversight Team.

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

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