

May 28, 2020

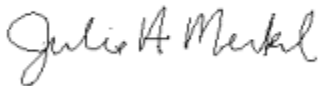
Mr. Bartelt  
Gavilon Grain, LLC Huntley  
1331 Capital Ave.  
Omaha, NE 68102

Sent via email to: [terry.bartelt@gavilon.com](mailto:terry.bartelt@gavilon.com)

Dear Mr. Bartelt:

Montana Air Quality Permit #5241-00 is deemed final as of May 28, 2020, by the Department of Environmental Quality (Department). This permit is for a county grain elevator. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,



Julie A. Merkel  
Permitting Services Section Supervisor  
Air Quality Bureau  
(406) 444-3626



Julie Ackerlund, MScEng  
Air Quality Engineer  
Air Quality Bureau  
(406) 444-4267

JM:JA  
Enclosures Enclosure

Montana Department of Environmental Quality  
Air, Energy & Mining Division

Montana Air Quality Permit #5241-00

Gavilon Grain, LLC  
1719 South 4<sup>th</sup> Road  
Huntley, Montana 59037

May 28, 2020



## MONTANA AIR QUALITY PERMIT

Issued To:  
Gavilon Grain, LLC  
Huntley, MT Facility  
1331 Capital Ave.  
Omaha, NE 68102

MAQP: #5241-00  
Application Complete: March 16, 2020  
Preliminary Determination Issued: April 13, 2020  
Department's Decision Issued: May 12, 2020  
Permit Final: May 28, 2020

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

Gavilon proposes to construct and operate a grain elevator facility which would have a permanent grain storage capacity of 750,000 bushels and a receiving and load-out capacity each of 38,000 bushels per hour (bu/hr). The permanent grain storage capacity would be composed of four 174,000-bushel bins, four 10,500-bushel bins, one 12,000-bushel bin, and a single 1.5 million-bushel temporary ground storage pile. The facility would have two truck receiving pits, one railcar receiving pit, one grain cleaning operation, one railcar loadout station, one truck loadout station that including two side taps loadouts, one truck loading of baghouse dust, and loading and unloading of grain to the storage pile. The facility would also have several unpaved haul roads leading to the grain elevators and the temporary storage pile.

#### B. Plant Location

Gavilon proposes to construct a grain handling facility with a single temporary flat grain storage pile on a site approximately 1 mile east of Huntley, Montana. The site has previously been used for agricultural purposes. The legal description of the facility is west half of Section 20, Township 2 North, Range 28 East, Yellowstone County, Montana. The physical address is 1719 South 4<sup>th</sup> Road, Huntley, Montana 59037.

### Section II: Conditions and Limitations

#### A. Emission Limitations

1. Gavilon shall install, operate, and maintain the following emission control equipment in accordance with the manufacturer's instructions to provide maximum pollution control (ARM 17.8.752):
  - a. Truck Receiving Pits #1 (EU01) and #2 (EU02) designed with baffles and rated at 38,000 bu/hr, each.
  - b. 2-sided and roofed enclosure at Truck Receiving Pits #1 (EU01) and #2 (EU02).

- c. A baghouse dust filter (or other control device with equivalent or better control efficiency) that controls emissions from both Truck Receiving Pits #1 (EU01) and #2 (EU02).
  - d. A baghouse dust filter (or other control device with equivalent or better control efficiency) that controls emissions from both the enclosure for the grain elevator internal handling (EU04) which includes a series of conveyors (belt, drag and /or bucket) and the grain cleaner (EU17).
  - e. Telescoping loadout spouts with socks, or a similar apparatus from the hopper discharge to the railcar to minimize open air grain drop distance for the Truck Loading Area (EU06), Truck Loading Side Tap 1 (EU08), Truck Loading Side Tap 2 (EU8), Railcar Loading (EU09) and the Truck Baghouse Dust Loadout (EU16).
2. Gavilon shall not receive more than 12,000,000 bushels of grain per calendar year (ARM 17.8.749).
  3. Gavilon shall handle no more than 1,500,000 bushels of grain per calendar year in one temporary storage pile (ARM 17.8.749).
  4. Gavilon shall fully enclose grain elevator internal handling equipment (EU04) including elevator legs and bucket conveyors, bin fill conveyors, belt conveyors and the distribution system and vent to the baghouse dust filter. The grain cleaner (EU17) shall also vent to the same baghouse dust filter. (ARM 17.8.749).
  5. Gavilon shall minimize the grain drop distance from the grain railcar bottoms (EU03) and from grain trucks (EU01 and EU02) to the receiving pit to minimize particulate emissions (ARM 17.8.752).
  6. Gavilon 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).
  7. Gavilon 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. Gavilon shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area (EU10 & EU15) with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precaution limitation in Section II.A.7 (ARM 17.8.752).

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 of Environmental Quality (Department) may require testing (ARM 17.8.105).

### C. Operational Reporting Requirements

1. Gavilon 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 would include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505). Gavilon shall submit the following information annually to the Department by February 15<sup>th</sup> of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505):

- a. annual grain throughput (bushels), and
  - b. annual temporary storage pile throughput (bushels).
2. Gavilon shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
  3. All records compiled in accordance with this permit must be maintained by Gavilon 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. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).
  4. Gavilon shall document, by month, the total bushels of grain received by the facility. By the 25<sup>th</sup> day of each month, Gavilon shall total the bushels of grain received for the previous month, and the total bushels of grain received since the beginning of the calendar year. The annual inventory of grain received by the facility would be used to verify compliance with the annual limitation in Section II.A.2. The monthly bushels of grain received, and the calendar year total of grain received shall be submitted along with the annual emission inventory (ARM 17.8.749).
  5. Gavilon shall document the total monthly bushels of grain deposited in the temporary storage pile. By the 25<sup>th</sup> day of each month, Gavilon shall calculate the bushels of grain deposited in the storage pile for the previous month. The information would be used to verify compliance with the limitation in Section

II.A.3. The monthly bushels of grain deposited, and the calendar year total of grain deposited in the storage pile for the previous year shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

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

1. Within 15 days after the actual start-up date of the grain elevator, Gavilon shall submit written notification to the Department of the initial start-up date of the affected equipment.
2. All compliance source tests, as required by the Montana Source Test Protocol and Procedures Manual.

SECTION III: General Conditions

- A. Inspection – Gavilon 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 such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (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 Gavilon fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Gavilon 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 affected in an adverse manner 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 source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Gavilon 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  
Gavilon Grain, LLC  
MAQP #5241-00

I. Introduction/Process Description

Gavilon proposes to construct a grain handling facility with a single temporary flat grain storage pile on a site approximately 1 mile east of Huntley, Montana. The site has previously been used for agricultural purposes. The legal description of the facility is west half of Section 20, Township 2 North, Range 28 East, Yellowstone County, Montana. The physical address is 1719 South 4<sup>th</sup> Road, Huntley, Montana 59037.

A. Permitted Equipment

Gavilon proposes to construct and operate a truck and rail grain handling elevator and storage facility. The facility has a permanent grain storage bin capacity of approximately 750,000 bushels, 38,000 bushels per hour (bu/hr) receiving and shipping capacity. The facility anticipates an annual grain processing rate of no more than 12,000,000 bushels and a temporary grain storage pile that is to be emptied at least annually, if not more often. Emission sources located at this facility include, but are not limited to, the following:

- Two Grain Truck Receiving Pits (EU01 & EU02) – 38,000 bu/hr (each);
- One Railcar Receiving Pit (EU03) – 38,000 bu/hr;
- Internal Handling System, (a.k.a. a headhouse composed of conveyor and elevators) (EU04) – 80,000 bu/hr;
- Vents from Nine Storage Bins (EU05) – 80,000 bu/hr:
  - Four 174,000-bushel storage bins,
  - Four 10,500-bushel storage bins, and
  - One 12,000-bushel storage bin;
- One Truck Loading Area (EU06) - 20,000 bu/hr;
- Two Truck Loading Side Taps (EU07 & EU08) – 15,000 bu/hr (each);
- One Railcar Loadout (EU09) – 80,000 bu/hr;
- Unpaved Roads: Haul Roads (EU10) and Storage Pile Roads (EU15);
- One Temporary Storage Pile: Truck Unloading to Conveyor (EU11), Conveyor Dropping to Pile (EU12), Storage Pile Wind Erosion (EU13), Storage Pile Truck Loading (EU14) – 25,000 bu/hr, 3.1-acre pile of 1,500,000-bushel capacity;
- Truck Baghouse Dust Loadout (EU16) – 10,000 bu/hr; and
- Grain Cleaner (EU17) – 15,000 bu/hr.

B. Source Description

The proposed truck and rail grain handling facility is designed to receive grain from local farms for storage and cleaning until it is shipped to market. The annual throughput capacity of the facility is 12,000,000 bushels. Locally grown grains are hauled to the facility generally via truck, but the facility is also designed to accept grain from railcars. There are three grain receiving pits; two pits designed for trucks and the third for railcars.

Trucks delivering grain would discharge grain into one of the two truck receiving pits, equipped with baffles and located within a 2-sided and roofed enclosure. The truck receiving pits are controlled with a single baghouse. The single railcar receiving pit is only



expected to be used when an off-specification railcar needs to be unloaded. The railcar receiving pit does not contain baffles or implement other particulate control measures. All transferring of grain is done using enclosed conveyors from the point of the receiving pits to the storage bins. The main elevator legs and conveyor system are fully enclosed to minimize the release of dust to the atmosphere. Grain can be processed for cleaning as necessary before shipping. Grain is most often shipped by railcar and occasionally by truck.

C. Response to Public Comments

<b>Person/Group Commenting</b>	<b>Draft Permit Reference</b>	<b>Comment</b>	<b>Department Response</b>
Gavilon Grain, LLC	Section II.A	Truck Receiving Pits are controlled by a baghouse and not the 2-sided building or baffles.	The Truck Receiving Pits BACT has been modified to reflect the receiving pits design is only controlled by a baghouse.
Gavilon Grain, LLC	Section II.A.2	Gavilon did not request the facility annual throughput be limited to 12 million bushels.	The application demonstrated their ambient air quality impact based on 12 million bushels and the permit shall restrict operations to 12 million bushels until another application is submitted demonstrating the ambient impact at a different throughput.
Gavilon Grain, LLC	Section II.A.5	Not all equipment can comply with the 2-foot grain drop requirement.	Language has been revised requiring that all grain drop distances be minimized.
Gavilon Grain, LLC	Section II.C	The reporting requirements are confusing for tracking grain.	Language has been revised and simplified to require reporting of grain received on an annual basis for the facility and the temporary storage pile.
Gavilon Grain, LLC	Section II.C	The reporting requirements are confusing for tracking grain.	Language has been revised and simplified to require reporting of grain received on an annual basis for the facility and the temporary storage pile.
Gavilon Grain, LLC	Permit Analysis Section III.	Requested BACT be amended to represent the facility design	BACT discussion has been revised to represent the grain elevator's operations and refined determinations.
Gavilon Grain, LLC	Permit and Analysis	Minor corrections requested	Language has been revised to correctly reflect the facility design and operation.

## 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 would provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Gavilon 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. In (2) of this rule, 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. In (1) of this rule, 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. As described in (2) of this rule, 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 17.8.221 Ambient Air Quality Standard for Visibility
3. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

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

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. In (1) of this rule, it requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. As described in (2) of this rule, Gavilon shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. In (3) of this rule, no person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
8. 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). Subpart DD, Standards of Performance for Grain Elevators, indicates that grain terminal elevators that have a permanent storage capacity of more than 2.5 million U.S. bushels are subject to the requires of this subpart. Gavilon 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. Gavilon submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Gavilon has a PTE greater than 25 tons per year of particulate matter (PM); 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. In (1) of this rule, it requires that a permit application be submitted prior to installation, modification, or use of a source. Gavilon submitted the required permit application for the current permit action. In (7) of this rule, it 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. Gavilon submitted an affidavit of publication of public notice for the February 7, 2020 issue of the Yellowstone County News, a newspaper of general circulation in the Town of Huntley in Yellowstone 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 Gaviion 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 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
12. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
13. 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).
14. 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.

15. 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.
16. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).

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

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

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

G. ARM 17.8, Subchapter 9 – Permit Requirements for Major Stationary Sources or Major Modifications Locating Within Nonattainment Areas, including, but not limited to:

This facility is not a major source nor considered a major modification.

H. ARM 17.8, Subchapter 10 – Preconstruction Permit Requirements for Major Stationary Sources of Modifications Located Within Attainment or Unclassified Areas, including, but not limited to:

ARM 17.8.1004 When Air Quality Preconstruction Permit Required. This current permit action does not constitute a major modification. Therefore, the requirements of this subchapter do not apply.

I. 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5241-00 for Gavilon, 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 for all HAPs.
    - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
    - d. This facility is not subject to any current NSPS.
    - e. This facility is not subject to any current NESHAP.
    - 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 Gavilon would be a minor source of emissions as defined under Title V.

### III. BACT Determination

A best available control technology (BACT) determination is required for each new or modified source. Gavilon shall install on the new or modified source the maximum air pollution control technology which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was submitted by Gavilon in the permit application for MAQP #5241-00, addressing some available methods of controlling particulate matter emissions from the grain elevator facility. The Department reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determination.

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

#### **Truck Receiving Pits, EU01 and EU02**

##### A. Electrostatic Precipitator (ESP)

An ESP ionizes the contaminated air flowing between oppositely charged electrodes. These charged particles migrate toward the oppositely charged plates, which are eventually collected and removed at the bottom of the ESP. An ESP can handle large gas volumes and is very efficient at removing small particles with removal efficiencies ranging from

approximately 90 percent to 99 percent. While an ESP can achieve high removal efficiencies, ESPs are not a viable option due to the combustible dust present at the grain elevator. For this reason, Gavilon did not propose an ESP as BACT for emission sources at this facility.

## 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 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 percent to 99 percent. A baghouse can achieve high removal efficiencies and the installation and operation costs of a baghouse are generally considerably less than an ESP. Gavilon proposed that installation of one baghouse shared by the two truck receiving pits constitutes BACT. The truck receiving pits are located below the baffles on the floor of each 24-foot long two-sided building. PM is generated during truck unloading as the grain drops through baffles into the receiving pit where the generated PM is controlled by the baghouse with a 99 percent control efficiency. The Department concurs with Gavilon that a baghouse or equipment of equivalent control (99 percent control) is BACT for the truck receiving pits, EU01 and EU02.

### **Railcar Receiving Pit, EU03**

The railcar receiving pit is expected to be infrequently used. Gavilon indicates the railcar pit is needed for when the facility loads an off-specification railcar and the railcar needs to be unloaded. Installation of any add-on control technology would be extremely expensive. BACT for the railcar receiving pit shall be best operating practices, to reduce fugitive emissions by maintaining the minimum drop distance possible and unloading during times of low ambient winds.

### **Grain Elevator Internal Handling, EU04**

The grain elevator internal handling (a.k.a. headhouse) transports the grain from the receiving pits to the storage bins through a series of fully enclosed conveyors (i.e. belt, drag and/or bucket conveyors) and transfers between conveyors. Gavilon estimates the full enclosure of these conveyors and transfer points and using a baghouse would control 99 percent of the PM. The Department concurs with Gavilon that a baghouse or equipment of equivalent control (99 percent control) is BACT for the grain elevator internal handling, EU04.

### **Grain Elevator Storage Bin Vents, EU05**

The nine grain storage bins' emissions would be limited by the capacity of the conveyors and the annual process rate of 12,000,000 bushels. Each storage bin would be enclosed and vented to allow for the release of air during the filling of each bin. Based on other similarly permitted facilities, the construction of enclosed storage bins with venting is considered best operating practices and the Department concurs this constitutes BACT.

### **Grain Shipping Area, EU06, EU07, EU08, EU09, and EU16**

The truck shipping area is limited by the capacity of each loadout process:

- Truck Loading, EU06 is limited to 20,000 bu/hr;



- Truck Loading Side Tap #1, EU07, 15,000 bu/hr;
- Truck Loading Side Tap #2, EU08, 15,000 bu/hr;
- Railcar Loading, EU09, 80,000 bu/hr; and
- Truck Baghouse Dust Loading, EU16, 20,000 bu/hr.

The majority of grain loadout would be to railcars. The annual grain throughput among EU06 through EU09 and EU16 is to be no more than 12,000,000 bushels. Three control technologies were review in the BACT analysis: enclosure/baghouse; oil suppression; and telescoping sock. The enclosure with baghouse technology and the application of mineral oil were considered to be cost prohibitive. Gavilon indicated the particulate control efficiency is 50 percent for telescoping spouts with loadout socks that reduce the open-air drop time.

Telescoping spouts with loadout socks on each of the five loadout activities was not eliminated in the BACT analysis and is a common BACT technology required at other similar sources. The Department concurs that telescoping spouts with loadout socks on each of the loadouts for EU06, EU07, EU08, EU09, and EU16 is BACT.

### **Unpaved Roads, EU10 and EU15**

Fugitive dust emissions generated from truck traffic associated with the grain elevator and temporary storage pile would be addressed in accordance with good operating practices for the facility. Good operating practices would consist of the application of chemical compounds and/or water as appropriate during dry conditions with drivers instructed to limit their vehicle speed to a maximum of 15 miles per hour on-site at all times. Potential fugitive road dust emissions are based on the facility's annual grain throughput of 12,000,000 bushels.

The good operating practices described above are similar controls and have similar costs to other comparable sources that were recently permitted. These good operating practices are considered BACT for the unpaved haul roads.

### **Storage Pile Truck Receiving, EU11**

Upon arrival of a truck delivering grain to the temporary storage pile, it unloads grain onto a receiving conveyor that is rated at 25,000 bu/hr. Fugitive dust emissions generated from trucks dropping grain onto the conveyor can be reduced by using good operating practices which includes minimizing the drop distance. These good operating practices are similar to controls required of other comparable facilities. The Department has determined that good operating practices that minimizing the drop of grain as much as possible is deemed to be BACT for unloading grain from trucks onto the conveyor serving the temporary storage pile.

### **Storage Pile Adding, EU12**

The addition of grain onto the temporary storage pile is limited by the delivery trucks' conveyor belt capacity of 25,000 bu/hr. Fugitive dust emissions generated from the conveyor dropping grain onto the temporary storage pile can be reduced by using good operating practices which includes minimizing the drop distance. These good operating practices are similar to controls required of other comparable facilities. The Department has determined that good operating practices which minimize the drop of grain as much as possible is deemed to be BACT for the conveyor drop to the temporary storage pile.

### **Temporary Storage Pile Wind Erosion, EU13**

Gavilon identified one feasible control technology for the storage pile wind erosion emissions, oil suppression. Gavilon indicated this could reduce wind erosion emissions by 60 percent. Applying mineral oil would require additional handling steps including unloading the grain at the at the elevator, applying oil, and then transporting the grain to the temporary storage pile. Gavilon claims the emissions generated by the additional handling would negate the minimal benefit of the oil application. Gavilon proposes to build steel or concrete walls around the temporary storage pile which the Department considers good operating practices to reduce wind erosion and deems as BACT.

### **Storage Pile Truck Loading, EU14**

Grain would be shipped from the temporary storage pile by truck. The loadout from the pile is limited by the shipping conveyor, either a portable conveyor or a front-end loader. The loadout is limited to 25,000 bu/hr and the capacity of the temporary grain storage pile of 1,500,000 bushels a year. The storage pile would be fully picked up at least once per year. The Department has determined that good operating practices by minimizing the drop of grain to the truck to be BACT for unloading grain from the temporary storage pile.

### **Grain Cleaner, EU17**

Grain may be processed through an enclosed cleaner. Gavilon has proposed to control the exhaust from the cleaner using a baghouse. The potential hourly through of the cleaner is 15,000 bushels and the annual throughput of the grain cleaner is equivalent to the facility throughput of 12,000,000 bushels. Gavilon has determined that installation of a baghouse with 99 percent PM control or other technology of similar particulate control efficiency, on the graining cleaner constitutes BACT. Gavilon proposes to design a single baghouse to handle the emissions from both the grain cleaner (EU17) and the internal grain handling (EU04). The Department concurs with Gavilon that operation of a baghouse is BACT for the grain cleaner, EU17.

IV. Emission Inventory

**Facility-wide Emissions (tons)**

<b>Emitting Unit ID</b>	<b>Emitting Unit</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
EU01	Truck Receiving Pit 1	0.32	0.11	0.02
EU02	Truck Receiving Pit 2			
EU03	Railcar Receiving Pit	5.76	1.40	0.23
EU04	Internal Grain Handling	0.11	0.06	0.01
EU05	Storage Bin Vents	4.50	1.13	0.20
EU06	Truck Loading Area	15.48	5.22	0.88
EU07	Truck Loading Side Tap 1			
EU08	Truck Loading Side tap 2			
EU09	Rail Loading			
EU14	Storage Pile Truck Loading			
EU16	Truck Loading (Dust Loadout)			
EU10	Haul Roads (Unpaved)	22.0	5.9	0.6
EU15	Storage Pile Unpaved Haul Roads			
EU11	Storage Pile Truck Receiving	4.05	1.33	0.23
EU12	Storage Pile Adding	0.0165	0.0078	0.0012
EU13	Storage Pile Wind Erosion	0.034	0.017	0.006
EU17	Grain Cleaner	0.45	0.07	0.01
<b>Total</b>		<b>52.7</b>	<b>15.3</b>	<b>2.2</b>

Footnotes:

<sup>a</sup>Emissions from unpaved roadways are included as a worst-case scenario. These fugitive emissions are defined as secondary emission and therefore do not contribute to PTE aggregation.

-The emission inventory reflects enforceable limits on production for the facility.

**Truck Receiving Pits (EU01 and EU02)**  
**Incoming Grain Receiving – SCC 3-02-008-02**

Max Process Rate = 12,000,000 bu/yr

(Applicant Info)

12,000,000 bu/yr

(Applicant Info)

Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)

60 lb/bu

(highest density grain value from AP-42, Appendix A)

Throughput = 360,000 tons/yr

360,000 tons/yr

**PM Emissions:**

Emission Factor = 0.18 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.18	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM Control Efficiency = 99% (Applicant Info-Baghouse)	99	%	(Applicant Info- Baghouse)
Calculation: (360,000 tons/yr)*(0.18 lb/ton)*(ton/2000 lb) = 32.40 ton/yr (uncontrolled)	32.40	ton/yr	(uncontrolled)
Calculation: ((32.40 ton/yr)*(1 - 99%) = 0.32 ton/yr (Baghouse emissions)	<b>0.32</b>	ton/yr	(Baghouse emissions)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.059 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.059	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM10 Control Efficiency = 99% (Applicant Info- Baghouse)	99	%	(Applicant Info- Baghouse)
Calculation: (12,000,000 bu/yr)*(0.059 lb/ton)*(ton/2000 lb) = 10.62 ton/yr (uncontrolled)	10.62	ton/yr	(uncontrolled)
Calculation: ((10.62 ton/yr ton/yr)*(1 - 99%)) = 0.11 ton/yr (Baghouse emissions)	<b>0.11</b>	ton/yr	(Baghouse emissions)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.01 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.01	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM2.5 Control Efficiency = 99% (Applicant Info- Baghouse)	99	%	(Applicant Info- Baghouse)
Calculation: (360,000 bu/yr)*(0.01 lb/ton)*(ton/2000 lb) = 1.80 ton/yr (uncontrolled)	1.80	ton/yr	(uncontrolled)
Calculation: (1.80 ton/yr)*(1 - 99%) = 0.02 ton/yr (Baghouse emissions)	<b>0.02</b>	ton/yr	(Baghouse emissions)

**Railcar Receiving Pit (EU03)****Incoming Grain Receiving – SCC 3-02-008-02**

Max Process Rate = 12,000,000 bu/yr (Applicant Info)	12,000,000	bu/yr	(Applicant Info)
Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)	60	lb/bu	(highest density grain value from AP-42, Appendix A)
Throughput = 360,000 tons/yr	360,000	tons/yr	

**PM Emissions:**

Emission Factor = 0.032 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.032	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM Control Efficiency = 0% No controls proposed	0	%	No controls proposed
Calculation: (360,000 bu/yr)*(0.032 lb/ton)*(ton/2000 lb) = 5.76 ton/yr (uncontrolled)	5.76	ton/yr	(uncontrolled)
Calculation: ((5.76 ton/yr ton/yr))*(1 - 0%) = 5.76 ton/yr (controlled)	<b>5.76</b>	ton/yr	(controlled)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.0078 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.0078	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM Control Efficiency = 0% No controls proposed	0	%	No controls proposed
Calculation: (12,000,000 bu/yr)*(0.0078 lb/ton)*(ton/2000 lb) = 1.40 ton/yr (uncontrolled)	1.40	ton/yr	(uncontrolled)
Calculation: ((1.40 ton/yr - 0.23 ton/yr)*(1 - 0%)) + (0.23 ton/yr) = 1.40 ton/yr (controlled)	<b>1.40</b>	ton/yr	(controlled)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.0013 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.0013	lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM Control Efficiency = 0% No controls proposed	0	%	No controls proposed
Calculation: (12,000,000 bu/yr)*(0.0013 lb/ton)*(ton/2000 lb) = 0.23 ton/yr (uncontrolled)	0.23	ton/yr	(uncontrolled)
Calculation: (0.23 ton/yr)*(1 - 0%) = 0.23 ton/yr (controlled)	<b>0.23</b>	ton/yr	(controlled)

**Internal Handling (EU04)****Headhouse & Grain Handling – SCC 3-02-005-30**

Max Process Rate = 12,000,000 bu/yr (Applicant Info)	12,000,000	bu/yr	(Applicant Info)
Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)	60	lb/bu	(highest density grain value from AP-42, Appendix A)
Throughput = 360,000 tons/yr	360,000	tons/yr	

**PM Emissions:**

Emission Factor = 0.061 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)	0.061	lb/ton	(AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)
PM Control Efficiency = 99.00% Baghouse (99%)	99.00	%	Baghouse (99%)
Calculation: (360,000 bu/yr)*(0.061 lb/ton)*(ton/2000 lb) = 10.98 ton/yr (uncontrolled)	10.98	ton/yr	(uncontrolled)
Calculation: (10.98 ton/yr)*(1 - 99%) = 0.11 ton/yr (controlled)	<b>0.11</b>	ton/yr	(controlled)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.034 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)	0.034	lb/ton	(AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)
PM10 Control Efficiency = 99% Baghouse (99%)	99.00	%	Baghouse (99%)
Calculation: (360,000 bu/yr)*(0.034 lb/ton)*(ton/2000 lb) = 6.12 ton/yr (uncontrolled)	6.12	ton/yr	(uncontrolled)
Calculation: (6.12 ton/yr)*(1 - 99%) = 0.06 ton/yr (controlled)	<b>0.06</b>	ton/yr	(controlled)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.0058 lb/ton (AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)	0.0058	lb/ton	(AP-42 Table 9.9.1-1, Headhouse & grain handling, 3/03)
PM2.5 Control Efficiency = 99% Baghouse (99%)	99.00	%	Baghouse (99%)
Calculation: (360,000 bu/yr)*(0.0058 lb/ton)*(ton/2000 lb) = 1.04 ton/yr (uncontrolled)	1.04	ton/yr	(uncontrolled)
Calculation: (1.04 ton/yr)*(1 - 99%) = 0.01 ton/yr (controlled)	<b>0.01</b>	ton/yr	(controlled)

**Storage Bin Vents (EU05)****Storage Bin (vent) – SCC 3-02-005-40**

Max Process Rate = 12,000,000 bu/yr (Applicant Info)	12,000,000	bu/yr	(Applicant Info)
Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)	60	lb/bu	(highest density grain value from AP-42, Appendix A)
Throughput = 360,000 tons/yr	360,000	tons/yr	

**PM Emissions:**

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

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

Calculation: (12,000,000 bu/yr)\*(0.025 lb/ton)\*(ton/2000 lb) = 4.50 ton/yr (uncontrolled)

4.50 ton/yr (uncontrolled)

**PM<sub>10</sub> Emissions:**

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

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

Calculation: (12,000,000 bu/yr)\*(0.0063 lb/ton)\*(ton/2000 lb) = 1.13 ton/yr (uncontrolled)

1.13 ton/yr (uncontrolled)

**PM<sub>2.5</sub> Emissions:**

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

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

Calculation: (12,000,000 bu/yr)\*(0.0011 lb/ton)\*(ton/2000 lb) = 0.20 ton/yr (uncontrolled)

0.20 ton/yr (uncontrolled)

**Truck Shipping Area 1 (EU06)****Truck Shipping Side Tap 1 (EU07)****Truck Shipping Side Tap 2 (EU08)****Railcar Shipping (EU09)****Truck Filled from Storage Pile (EU14)****Truck Baghouse Dust Loadout (EU16)****Loadout – SCC 3-02-005-60**

Max Process Rate = 12,000,000 bu/yr (Applicant Info)

12,000,000 bu/yr (Applicant Info)

Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)

60 lb/bu (highest density grain value from AP-42, Appendix A)

Throughput = 360,000 tons/yr

360,000 tons/yr

**PM Emissions:**

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

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

PM Control Efficiency = 0% (Applicant Info - No Controls)

0 % (Applicant Info - No Controls)

Calculation: (360,000 bu/yr)\*(0.086 lb/ton)\*(ton/2000 lb) = 15.48 ton/yr (uncontrolled)

15.48 ton/yr (uncontrolled)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.029 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)	0.029	lb/ton	(AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)
PM <sub>10</sub> Control Efficiency = 0% (Applicant Info - No Controls)	0	%	(Applicant Info - No Controls)
Calculation: (360,000 bu/yr)*(0.029 lb/ton)*(ton/2000 lb) = 5.22 ton/yr (uncontrolled)	<b>5.22</b>	ton/yr	(uncontrolled)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.0049 lb/ton (AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)	0.0049	lb/ton	(AP-42 Table 9.9.1-1, Grain shipping - Truck, 3/03)
PM ≤ 2.5 μm Control Efficiency = 0% (Applicant Info - No Controls)	0	%	(Applicant Info - No Controls)
Calculation: (360,000 bu/yr)*(0.0049 lb/ton)*(ton/2000 lb) = 0.88 ton/yr (uncontrolled)	<b>0.88</b>	ton/yr	(uncontrolled)

**Unpaved Roadways (Haul Roads) - Secondary Emissions****Haul Roads (EU10) and Storage Pile Haul Roads (EU15)**

Vehicle Miles Travelled (VMT):	6818	Miles/Year
Mean Vehicle Weight:	27.5	Tons (Weight Empty/Full)

Particulate Emissions (controlled):

Emission Factor	$EF = k(s/12)^a * (W/3)^b * [(365-P)/365]$ [AP-42 13.2.2.2, 11/06]
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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 <sub>10</sub> =	1.5	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant PM <sub>2.5</sub> =	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, Gavilon selected value for MSW landfills]
W, Mean Vehicle Weight (tons) =	27.5	[Gavilon Estimate]
a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
a, Empirical Constant PM <sub>10</sub> / PM <sub>2.5</sub> =	0.9	[AP-42 Table 13.2.2-2, 11/06]
b, Empirical Constant PM - PM <sub>2.5</sub> =	0.45	[AP-42 Table 13.2.2-2, 11/06]
p, Days w/ Precipitation (≤ 0.01")	90	[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 - 90)/365] =	6.444 lbs/VMT
Calculations	(6.444 lbs/VMT) * (6,818 miles/year) * (0.0005 tons/lb) =	<b>22.0 TPY</b>

**PM10 Emissions (controlled):**

Emission Factor	EF = 1.5 * (6.4/12)^0.9 * (27.5/3)^0.45 * [(365- 90)/365] =	1.740 lbs/VMT
Calculations	(1.740 lbs/VMT) * (6,818 miles/year) * (0.0005 tons/lb) =	<b>5.9 TPY</b>

**PM2.5 Emissions (controlled):**

Emission Factor	EF = 0.15 * (6.4/12)^0.9 * (27.5/3)^0.45 * ((365- 90)/365) =	0.174 lbs/VMT
Calculations	(0.174 lbs/VMT) * (6,818 miles/year) * (0.0005 tons/lb) =	<b>0.6 TPY</b>

**Storage Pile Truck Receiving (Unloading) (EU11)**

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

Max Process Rate = 1,500,000 bu/yr (Applicant Info)	1,500,000 bu/yr	(Applicant Info)
Density = 60 lb/bu (highest density grain value from AP-42, Appendix A)	60 lb/bu	(highest density grain value from AP-42, Appendix A)
Throughput = 45,000 tons/yr	45,000 tons/yr	

**PM Emissions:**

Emission Factor = 0.18 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.18 lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM Control Efficiency = 0% No Controls	0 %	No Controls
Calculation: (45,000 tons/yr)*(0.18 lb/ton)*(ton/2000 lb) = 4.05 ton/yr (uncontrolled)	<b>4.05</b> ton/yr	(uncontrolled)
Calculation: ((4.05 ton/yr)*(1 - 0%) = 4.05 ton/yr (controlled)	<b>4.05</b> ton/yr	(controlled)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.059 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)	0.059 lb/ton	(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
PM10 Control Efficiency = 0% No Controls	0 %	No Controls
Calculation: (1,500,000 bu/yr)*(0.059 lb/ton)*(ton/2000 lb) = 1.33 ton/yr (uncontrolled)	<b>1.33</b> ton/yr	(uncontrolled)
Calculation: ((1.33 ton/yr ton/yr)*(1 - 0%)) = 1.33 ton/yr (controlled)	<b>1.33</b> ton/yr	(controlled)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.01 lb/ton (AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)		(AP-42 Table 9.9.1-1, Grain Receiving Straight Truck, 3/03)
	0.01 lb/ton	
PM <sub>2.5</sub> Control Efficiency = 0% No Controls	0 %	No Controls
Calculation: (45,000 bu/yr)*(0.01 lb/ton)*(ton/2000 lb) = 0.23 ton/yr (uncontrolled)	<b>0.23</b> ton/yr	(uncontrolled)
Calculation: (0.23 ton/yr)*(1 - 0%) = 0.23 ton/yr (controlled)	<b>0.23</b> ton/yr	(controlled)

**Unloading to Storage Pile and Loading Trucks from Storage Pile (EU12)**

Storage Pile Throughput =	45,000 tons grain/yr	(Applicant Info)
Processing both Unloading and Loading Doubles the Grain Handlings Throughput =	90,000 total tons/yr	

Emission Factor (lb/ton) =  $EF = k(0.0032) * (U/5)^{1.3} / (M/2)^{1.4}$  [ AP-42, 13.2.4-3, 10/06]

where:

k, particle size multiplier, PM =	0.74	[AP-42, Section 13, 11/06, Aerodynamic Particle Size Multiplier]
k, particle size multiplier, PM <sub>10</sub> =	0.35	[AP-42, Section 13, 11/06, Aerodynamic Particle Size Multiplier]
k, particle size multiplier, PM <sub>2.5</sub> =	0.053	[AP-42, Section 13, 11/06, Aerodynamic Particle Size Multiplier]
U, mean wind speed (mph) =	10.8	[Applicant provided, based on Billings/Logan Int'l Airport data from 1984-1992]
M, material moisture content (%) =	15.50	[Applicant provided, based on corn value in the Office of Technology Assessment's "Technology and Policy for Suppressing Grain Dust Explosions in Storage Facilities, September 1995]
PM Emission Factor (lb/ton) =	0.00037	lb/ton
PM <sub>10</sub> Emission Factor (lb/ton) =	0.00017	lb/ton
PM <sub>2.5</sub> Emission Factor (lb/ton) =	0.000026	lb/ton

**PM Emissions:**

(90,000 total tons/yr)\*(0.00037 lb/ton)\*(ton/2000 lb) = **0.0165 TPY** (uncontrolled)

**PM<sub>10</sub> Emissions:**

(90,000 total tons/yr)\*(0.00017 lb/ton)\*(ton/2000 lb) = **0.0078 TPY** (uncontrolled)

**PM2.5 Emissions:**

(90,000 total tons/yr)\*(0.000026 lb/ton)\*(ton/2000 lb) = **0.0012 TPY** (uncontrolled)

**Storage Pile Erosion (EU13)**

Storage Pile Size = 3.1 acres (Applicant Info) 3.1 acres (Applicant Info)  
 Days Exposed = 365 days (Applicant Info) 365 days (Applicant Info)  
 Throughput = 1 tons/yr 1 tons/yr

**PM Emissions:**

Emission Factor = 0.06 lb/day/acre (Applicant Info) 0.06 lb/day/acre (Applicant Info)  
 Calculation: (3.1 acres)\*(365 days)\*(0.06 lb/day/acre)\*(ton/2000 lb) = **0.034 TPY** (uncontrolled)

**PM<sub>10</sub> Emissions:**

Emission Factor = 0.03 lb/day/acre (Applicant Info) 0.03 lb/day/acre (Applicant Info)  
 Calculation: (3.1 acres)\*(365 days)\*(0.03 lb/day/acre)\*(ton/2000 lb) = **0.017 TPY** (uncontrolled)

**PM<sub>2.5</sub> Emissions:**

Emission Factor = 0.01 lb/day/acre (Applicant Info) 0.01 lb/day/acre (Applicant Info)  
 PM10 Control Efficiency = 0% (no controls) 0 % (no controls)  
 Calculation: (3.1 acres)\*(365 days)\*(0.01 lb/day/acre)\*(ton/2000 lb) = **0.006 TYP** (uncontrolled)

**Grain Cleaner (EU17)****Grain Cleaning – SCC 3-02-005-03**

Max Process Rate = 12,000,000 bu/yr (Applicant Info) 12,000,000 0 bu/yr (Applicant Info)  
 Density = 60 lb/bu (highest density grain value from AP-42, Appendix A) 60 lb/bu (highest density grain value from AP-42, Appendix A)  
 Throughput = 360,000 tons/yr 360,000 tons/yr

**PM Emissions:**

Total PM Emission Factor = 0.075 lb/ton (AP-42 Table 9.9.1-1, grain cleaning (cyclone controlled), 3/03) 0.075 lb/ton (AP-42 Table 9.9.1-1, grain cleaning (cyclone controlled), 3/03)  
 PM Cyclone Control Efficiency = 85% (AP-42, Appendix B, Table B.2-3, centrifugal collector - med-efficiency) 85 % (SOURCE)  
 PM Emission Factor (uncontrolled) = (0.075) / (1 - 85/100) = 0.5 lb/ton 0.5 lb/ton (uncontrolled)  
 PM Fabric Filter Efficiency = 99.5% (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.) 99.5 % (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.)

Calculation:  $(360,000 \text{ tons/yr}) \times (0.50 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 90.00 \text{ ton/yr}$  (uncontrolled)      90.00 ton/yr (uncontrolled)

Calculation:  $(90.00 \text{ ton/yr}) \times (1 - 99.5\%) = 0.45 \text{ ton/yr}$  (controlled)      **0.45** ton/yr (controlled)

**PM<sub>10</sub> Emissions:**

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

PM<sub>10</sub> Cyclone Control Efficiency = 75% (AP-42, Appendix B, Table B.2-3, centrifugal collector - med-efficiency)      75 % (SOURCE)

PM<sub>10</sub> Emission Factor (uncontrolled) =  $(0.019) / (1 - 75/100) = 0.076 \text{ lb/ton}$       0.076 lb/ton (uncontrolled)

PM<sub>10</sub> Fabric Filter Efficiency = 99.5% (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.)      99.5 % (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.)

Calculation:  $(360,000 \text{ tons/yr}) \times (0.076 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 13.68 \text{ ton/yr}$  (uncontrolled)      13.68 ton/yr (uncontrolled)

Calculation:  $(13.68 \text{ ton/yr}) \times (1 - 99.5\%) = 0.07 \text{ ton/yr}$  (controlled)      **0.07** ton/yr (controlled)

**PM<sub>2.5</sub> Emissions:**

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

PM<sub>2.5</sub> Cyclone Control Efficiency = 50% (AP-42, Appendix B, Table B.2-3, centrifugal collector - med-efficiency)      50 % (SOURCE)

PM<sub>2.5</sub> Emission Factor (uncontrolled) =  $(0.0032) / (1 - 50/100) = 0.0064 \text{ lb/ton}$       0.0064 lb/ton (uncontrolled)

PM<sub>2.5</sub> Fabric Filter Efficiency = 99% (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.)      99 % (AP-42, Appendix B, Table B.2-3, fabric filter - med temp.)

Calculation:  $(360,000 \text{ tons/yr}) \times (0.0064 \text{ lb/ton}) \times (\text{ton}/2000 \text{ lb}) = 1.15 \text{ ton/yr}$  (uncontrolled)      1.15 ton/yr (uncontrolled)

Calculation:  $(1.15 \text{ ton/yr}) \times (1 - 99\%) = 0.01 \text{ ton/yr}$  (controlled)      **0.01** ton/yr (controlled)

V. Existing Air Quality

Gavilon’s proposed facility would operate 1 mile east of Huntley, Montana in the west half of Section 20, Township 2 North, Range 28 East, in Yellowstone County. The facility would only have particulate matter emissions and this area is classified as attainment or unclassified

for particulate matter. The limitations and conditions in MAQP #5241-00 ensure the facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS).

VI. Ambient Air Impact Analysis

The Department determined that based on the proposed emission sources and controls, the impacts from this permitting action would be minor. The Department believes it would not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

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

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

## VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Air, Energy & Mining Division**  
**Air Quality Bureau**  
**P.O. Box 200901, Helena, Montana 59620**  
**(406) 444-3490**

**ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Gavilon Grain, LLC  
1719 South 4<sup>th</sup> Road  
Huntley, MT 59037

*Montana Air Quality Permit number (MAQP):* #5241-00

*EA Draft:* April 13, 2020  
*EA Final:* May 12, 2020  
*Permit Final:* May 28, 2020

1. *Legal Description of Site:* Gavilon Grain, LLC (Gavilon) proposes to construct and operate a grain elevator one mile east of Huntley, Montana. The legal description of the facility location is the west half of Section 20, Township 2 North, Range 28 East in Yellowstone County.

The grain elevator is proposed for a parcel of agricultural land located between Interstate 94 about 0.4 miles to the south, the BNSF railway about 0.1 miles to the north and state Highway 312 further north. Neighboring properties are in agricultural production, hosting typical agricultural structures and residences, with the exception of the Huntley Cemetery adjacent to the southern border. The nearest residence is approximately 1,000 feet west of the proposed grain elevator. Gavilon anticipates that 28 trains per year would access the spur rail to the facility.

2. *Description of Project:* Gavilon proposes to install and operate a grain elevator, a temporary storage pile, and a grain cleaner. Gavilon is planning to replace their Billings grain elevator with this new facility in Huntley. This Huntley facility would process no more than 12,000,000 bushels of grain during a 12-month period. A complete list of the permitted equipment is included in Section I.A. of the permit analysis.
3. *Objectives of Project:* This facility would replace the Billings facility providing grain elevator services for storage and shipping.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. Therefore, the “no-action” alternative would deny the issuance of the Montana Air Quality Permit (MAQP) to the facility. Gavilon would lack the grain storage capacity after discontinuing operation of the Billings grain elevator and could potentially lose business to its competitors. The Department does not consider the “no action” alternative to be appropriate because Gavilon has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no action” alternative was eliminated from further consideration. Other alternatives considered were discussed in the Best Available Control Technology (BACT) analysis.

5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5142-00.
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. *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 particulate matter (PM), particulate matter of 10 microns or less in diameter (PM10), and particulate matter of 2.5 microns or less in diameter (PM2.5) emissions. Conditions requiring control mechanisms have been placed within MAQP #5241-00 to ensure that only minor air quality impacts would occur. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. *Water Quality, Quantity and Distribution*

This project requires both a Montana storm water permit for construction and a sanitary waste septic system approval. Therefore, the project would have minor 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 25 acres would be disturbed. PM, PM10, and PM2.5 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 #5241-00.

D. *Vegetation Cover, Quantity, and Quality*

The proposed project would have minor impacts on the surrounding vegetation because of construction of the facility. The property and surrounding land are currently agricultural in nature. The PM, PM10, and PM2.5 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 grain elevator would have minor impacts on the surrounding property from both the visual perspective, as well as noise pollution. The nearest resident is 1,000 feet from proposed facility. The grain elevator would be 0.4 miles from Interstate 94 and 0.1 miles from the BNSF main-line. The nearest resident is located roughly the same distances from Interstate 94 and the BNSF railway. A railroad spur would access the facility and would approach the nearest resident at 1,200 feet or greater.

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 experience 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, PM10, and PM2.5. These emissions would be minimized by limitations and conditions that would be included in MAQP #5142-00. 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 #5142-00. 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) on the original permit application. The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. The Species of Concern Data Report include Snapping Turtle, Spiny Softshell, Sauger, Great Blue Heron, Pinyon Jay, Bald Eagle, Little Brown Myotis, Hoary Bat, and the Bat Roost. Because emission increases are minor, and disturbance is at an agricultural property, the Department has determined that there would be a minor disturbance to unidentified 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 and brought in as highline power. 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, three previously recorded sites were noted in the vicinity the project. These sites include a historical irrigation ditch and two historical railroads. The property is in agricultural operation, so any impacts to these historical sites has already occurred and the development of the proposed grain elevator 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, PM10, and PM2.5 in the proposed area. However, conditions have been placed in MAQP #5241-00 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. *SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:*  
The following comments have been prepared by the Department.

A. *Social Structures and Mores*

The proposed 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 being constructed in a developing industrial area.

B. *Cultural Uniqueness and Diversity*

Only minor impacts to the cultural uniqueness and diversity of the area would be anticipated as the location is already largely industrial. Operation of the facility is not expected to impact the cultural uniqueness and diversity. In addition, based on the SHPO cultural resource inventory for the area, there is a low likelihood that cultural properties would be impacted as there are no records for the area. 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 construction activities and that would occur over an extended period of time for completion. However, 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. 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 a limited number of employees would be hired for the proposed project. Temporary construction-related positions could result from this project. Gavilon anticipates the facility could employ six individuals. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size and seasonal nature of the facility.

H. *Distribution of Population*

The proposed project would have minor impacts on the employment and population of the area as up to six employees and temporary construction employees would be required for the facility. However, any impacts to the quantity and distribution of employment from construction related employment would be minor because the operations are seasonal in nature. Overall, any impacts to the distribution of population in the area would be minor.

I. *Demands for 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 #5241-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that

would be contained in MAQP #5241-00. 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 and seasonal nature 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 #5241-00. 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 #5241-00.

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 grain elevator. MAQP #5241-00 includes conditions and limitations to ensure the facility would 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 Conservation Program

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

EA prepared by: J. Ackerlund

Date: April 13, 2020