Air, Energy & Mining Division



January 2, 2024

George Killham United Grain Corporation Pompeys Pillar Elevator 200 SW Market St., Suite 1780 Portland, OR 97201-5715

Sent via email: gkillham@unitedgrain.com

RE: Final Permit Issuance for MAQP #3129-01

Dear Mr. Killham:

Montana Air Quality Permit (MAQP) #3129-01 is deemed final as of December 28, 2023, by DEQ. This permit is for United Grain Corporation. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

2/1h

Bo Wilkins Bureau Chief Air Quality Bureau (406) 444-3626

for Part Prank

John P. Proulx Air Quality Engineer Air Quality Bureau (406) 444-5391

Montana Department of Environmental Quality Air, Energy & Mining Division Air Quality Bureau

Montana Air Quality Permit #3126-01

United Grain Corporation Pompeys Pillar Elevator 200 SW Market St., Suite 1780 Section 28, Township 3 North, Range 30 East Portland, OR 97201-5715

December 28, 2023



MONTANA AIR QUALITY PERMIT

Issued to: United Grain Corporation Pompeys Pillar Elevator 200 SW Market St., Suite 1780 Portland, OR 97201-5715 MAQP #: #3126-01 Administrative Amendment (AA) Request Received: 11/17/2023 DEQ's Decision on AA: 12/12/2023 Permit Final: 12/28/2023

An air quality permit, with conditions, is hereby granted to the United Grain Corporation - Pompeys Pillar Elevator, hereinafter referred to as "UGC" pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

UGC operates a rail loadout grain sub-terminal which is located about 0.5 miles west of Exit 23 on U.S. Interstate Highway 94, adjacent to the south side of State Highway 312, and approximately 2.25 miles west-southwest of Pompeys Pillar, Montana. The legal description of the facility is the W ¹/₂ of the NW ¹/₄ of Section 28, Township 3 North, Range 30 East, Yellowstone County, Montana.

B. Current Permit Action

On November 17, 2023, the Department of Environmental Quality (DEQ) received an administrative amendment request to change the name from United Harvest, LLC. – Pompeys Pillar Elevator to United Grain Corporation – Pompeys Pillar Elevator.

SECTION II: Conditions and Limitations

- A. Emission Control Requirements and Limitations
 - 1. UGC shall operate and maintain the negative air fan and cyclone as specified in their application for an air quality permit and all supporting documentation (ARM 17.8.752).
 - 2. UGC shall not cause or authorize emissions to be discharged into the outdoor atmosphere, that exhibit an opacity of 20% or greater (ARM 17.8.304).
 - 3. Rail loadout grain sub-terminal production shall not exceed 8,000,000 bushels during any rolling 12-month time period (ARM 17.8.749).
 - 4. UGC shall not cause or authorize the use of any street, road, or parking area without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

- 5. UGC shall treat all unpaved portions of the haul roads, access roads, and the general plant property with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (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 of Environmental Quality (Department) may require testing (ARM 17.8.105).
- C. Operational and Emission Inventory Reporting Requirements
 - 1. UGC shall supply DEQ with annual production information for all emission points, as required by DEQ in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the equipment list contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to DEQ by the date required in the emission inventory request. Information shall be in the units required by DEQ. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 2. UGC shall notify DEQ of any construction or improvement project conducted pursuant to ARM 17.8.745(1)(a) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to DEQ, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(a)(i-v) (ARM 17.8.745).
- 3. UGC shall document, by month, the total production from the rail loadout grain sub-terminal. By the 25th of each month, UGC shall total the production from the rail loadout grain sub-terminal during the previous 12 months to verify compliance with the limitation in Section II.A.3. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
- 4. All records compiled in accordance with this permit must be maintained by UGC 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 DEQ, and must be submitted to DEQ upon request (ARM 17.8.749).

D. Notification

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

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

SECTION III: General Conditions

- A. Inspection UGC shall allow the DEQ'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 UGC fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving UGC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, et seq. (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, et seq., MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the DEQ's decision may request, within 15 days after the DEQ 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 DEQ'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 DEQ'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 DEQ's decision is final 16 days after the DEQ'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 DEQ at the location of the source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by UGC 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 Analysis United Grain Corporation – Pompeys Pillar Elevator MAQP #3126-01

I. Introduction/Process Description

United Grain Corporation (UGC) operates a rail loadout grain sub-terminal.

A. Permitted Equipment

Equipment used at this facility includes all of the following, and related ancillary equipment:

- 1. Truck Receiving Pit
- 2. Rail Reclaim Hopper Pit
- 3. Receiving Drag Conveyor 20,000 bph
- 4. Receiving Leg 20,000 bph
- 5. Distribution Top Binfill Drag Conveyor 20,000 bph
- 6. Bottom Reclaim Drag Conveyor 50,000 bph
- 7. Loadout Shipping Leg 50,000 bph
- 8. Loadout Bulkweigher 50,000 bph
- 9. Four Silo Bins with Vents 164,500 bushel capacity, 42 feet diameter and 150 feet tall each
- 10. Auto Grain Sample & Collection System
- 11. Rail Loadout Spout 50,000 bph
- 12. Negative Air/Cyclone Dust Control System.
- B. Site Location and Description

United Grain Corporation (UGC) operates a rail loadout grain sub-terminal, on a 97-acre parcel located about 0.5 miles west of Exit 23 on U.S. Interstate Highway 94, adjacent to the south side of State Highway 312, and approximately 2.25 miles west-southwest of Pompeys Pillar, Montana. The legal description of the facility is the W ¹/₂ of the NW ¹/₄ of Section 28, Township 3 North, Range 30 East, Yellowstone County, Montana.

Locally grown grains are trucked in by hopper truck. Each truck is weighed on a platform scale and a probe takes a sample of the inbound grain for quality assurance measures. The trucks are routed to the receiving building where both truck hoppers are simultaneously discharged into an elongated receiving pit. Particulate matter emissions from the unloading operation are collected by a negative air system and routed to a cyclone for control. Enclosed drag conveyors and a bucket elevator, rated at 20,000 bushels per hour, route the grain into concrete storage silos, or to a bulk weigher located over the railroad track. An enclosed drag conveyor is be used to transport grain from below the storage silos. Both the reclaim conveyor and the shipping leg are sized to handle 50,000 bushels per hour. The bulk loadout scale is sized to allow a 110-car unit train to be loaded in a 12-hour shift.

United Grain Corporation utilizes the Cenex Harvest States local office in Lewistown, and its personnel, to operate the facility.

C. Permit History

MAQP 3126-00 was issued to United Harvest, LLC. – Pompeys Pillar Elevator on October 24, 2001.

D. Current Permit Action

On November 17, 2023, the Department of Environmental Quality (DEQ) received an administrative amendment request to change the name from United Harvest, LLC. – Pompeys Pillar Elevator to United Grain Corporation – Pompeys Pillar Elevator. DEQ also updated the permit to reflect rule reference changes, and current format and naming conventions. **MAQP #3126-01** replaces MAQP #3126-00.

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 DEQ. Upon request, DEQ will provide references for the location of complete copies of all applicable rules and regulations, or copies where appropriate.

- A. ARM 17.8, Sub-Chapter 1, General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This section includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements.</u> Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of DEQ, 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 DEQ. The Department has determined, for the current permitting action, that no testing is required.
 - 3. <u>ARM 17.8.106 Source Testing Protocol.</u> The requirements of this rule apply to any emission source testing conducted by DEQ, 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., MCA.

UGC 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 DEQ upon request.

4. <u>ARM 17.8.110 Malfunctions.</u> (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. <u>ARM 17.8.111 Circumvention.</u> (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Sub-Chapter 2, Ambient Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.204 Ambient Air Monitoring</u>
 - 2. <u>ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide</u>
 - 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. <u>ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide</u>
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. <u>ARM 17.8.221 Ambient Air Quality Standard for Visibility</u>
 - 9. <u>ARM 17.8.222 Ambient Air Quality Standard for Lead</u>
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
 - 11. ARM 17.8.230 Fluoride in Forage

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

- C. ARM 17.8, Sub-Chapter 3, Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants.</u> This rule requires that no person may cause or authorize emissions to be discharged into an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter Airborne.</u> This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. Under this rule, UGC 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. <u>ARM 17.8.340 Standard of Performance for New Stationary Sources</u>. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). UGC is considered an NSPS affected facility under 40 CFR 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A.</u> General Provisions
 - b. <u>40 CFR 60, Subpart DD, Standards of Performance for Grain Elevators.</u> This subpart applies because the grain terminal elevators have a storage capacity of more than 2.5 million U.S. bushels are subject to the requirements of this subpart. UGC 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, Sub-Chapter 5, Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. 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 DEQ. An application fee was not required because the current permit action is considered an administrative change.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees.</u> An annual air quality operation fee must, as a condition of continued operation, be submitted to DEQ by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by DEQ; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

- E. ARM 17.8, Sub-Chapter 7, Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required.</u> 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. UGC has a PTE greater than 25 tons per year of Particulate Matter (PM); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes.</u> This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.</u> (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. 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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

- 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. This rule requires that the permits issued by the DEQ 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. A BACT analysis was not required for the current permit action because the permit change is considered and administrative permit change.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the DEQ at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving UGC 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. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the DEQ'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. <u>ARM 17.8.760 Additional Review of Permit Applications</u>. This rule describes the DEQ's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
- 12. <u>ARM 17.8.762 Duration of Permit</u>. 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. 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 DEQ.
- 16. <u>ARM 17.8.770 Additional Requirements for Incinerators</u>. This rule specifies the additional information that must be submitted to the DEQ for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
- 17. <u>ARM 17.8.771 Mercury Emission Standards for Mercury-Emitting Generating Units</u>. This rule identifies mercury emission limitation requirements, mercury control strategy requirements, and application requirements for mercury-emitting generating units.
- F. ARM 17.8, Sub-Chapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:

<u>ARM 17.8.801 Definitions</u>. This facility is not defined as a "major stationary source" because it is not a listed source and does not have the potential to emit more than 250 tons per year of any pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (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 DEQ may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
 - 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program</u>. (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 #3126-01 for UGC, 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_{10} nonattainment area.
 - d. This facility is not subject to any current NSPS.

- e. This facility is not subject to any current NESHAP standards.
- f. This source is not a Title IV affected source, or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

III. BACT Determination

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

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit change.

IV. Emission Inventory

Estimates of potential emissions from the Rail Loadout Grain Sub-terminal at Pompeys Pillar.

Air Pollutants (ton/year)							
Source	PM	PM_{10}	NO _x	VOC	СО	SO ₂	
Grain Receiving	8.6	2.8					
Internal Handling	7.3	4.1					
Grain Shipping	10.3	3.5					
Total Potential Emissions	26.2	10.4	na	na	na	na	

na = not applicable

Maximum Annual Throughput = 8,000,000 bushel/year Product Density = 59.73 lb/bushel Process Rate = 59.73 lb/bushel * 8.0 x 10⁶ bushel/yr * 1 ton/2000 lb = 238,920 ton/year

Grain Receiving

PM Emissions $\{AP-42, Table 9.9.1-1, 5/98, Straight Truck\}$ Emission Factor = 0.18 lb/ton $\{AP-42, Table 9.9.1-1, 5/98, Straight Truck\}$ Control Efficiency = 60 % $\{Negative Air / Cyclone\}$ Calculations: 238,920 ton/yr * 0.18 lb/ton * (1 - 0.60) * 1 ton / 2,000 lb = 8.6 ton/year

 $\begin{array}{ll} PM_{10} \mbox{ Emissions} \\ Emission \mbox{ Factor} = 0.059 \mbox{ lb/ton} & {AP-42, Table 9.9.1-1, 5/98, Straight Truck} \\ Control \mbox{ Efficiency} = 60 \% & {Negative \mbox{ Air / Cyclone}} \\ Calculations: \mbox{ 238,920 ton/yr} * 0.059 \mbox{ lb/ton} * (1 - 0.60) * 1 \mbox{ ton / 2,000 \mbox{ lb}} = 2.8 \mbox{ ton/year} \end{array}$

Internal Handling

PM Emissions $\{AP-42, Table 9.9.1-1, 5/98\}$ Emission Factor = 0.061 lb/ton $\{AP-42, Table 9.9.1-1, 5/98\}$ Control Efficiency = 0 % $\{AP-42, Table 9.9.1-1, 5/98\}$ Calculations: 238,920 ton/yr * 0.061 lb/ton * 1 ton / 2,000 lb = 7.3 ton/year

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 $\label{eq:pm_10} \begin{array}{ll} \mbox{Emissions} \\ \mbox{Emission Factor} = 0.034 \mbox{ lb/ton} & {\mbox{AP-42, Table 9.9.1-1, 5/98}} \\ \mbox{Control Efficiency} = 0 \% & {\mbox{Calculations: } 238,920 \mbox{ ton/yr } * 0.034 \mbox{ lb/ton } * 1 \mbox{ ton } / 2,000 \mbox{ lb} = 4.1 \mbox{ ton/year} \end{array}$

Grain Shipping

 PM Emissions

 Emission Factor = 0.086 lb/ton
 {AP-42, Table 9.9.1-1, 5/98, Truck}

 Control Efficiency = 0 %

 Calculations: 238,920 ton/yr * 0.086 lb/ton * 1 ton / 2,000 lb = 10.3 ton/year

 $\begin{array}{ll} PM_{10} \mbox{ Emissions} \\ Emission \mbox{ Factor } = 0.029 \mbox{ lb/ton} \\ Control \mbox{ Efficiency } = 0 \mbox{ } \\ Calculations: \mbox{ 238,920 ton/yr } 0.059 \mbox{ lb/ton } 1 \mbox{ ton } / \mbox{ 2,000 lb } = 3.5 \mbox{ ton/year} \end{array}$

V. Existing Air

The area surrounding the proposed facility is predominantly agricultural and rural in nature. The emissions from the proposed facility would be seasonal in nature, and there is generally good dispersion in the area. Therefore, in the view of DEQ, the amount of controlled emissions from this facility will not cause an exceedance of any ambient air quality standard.

VI. Air Quality and Impacts

DEQ determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, the DEQ believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #3126-01, DEQ determined that there will be no impacts from this permitting action. The DEQ 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 2-10-101 through 105, MCA, DEQ has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications.

YES	NO	
Х		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?
	Х	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)

YES	NO	
	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?
	Х	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)

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: John P. Proulx, Air Quality Engineer Date: 11/30/2023