Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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May 26, 2010

Chris Jennings
Mountain Meadows Pet Products, Inc.
P.O. Box 778
Lewistown, MT 59457

Dear Mr. Jennings:

Montana Air Quality Permit #2825-04 is deemed final as of May 26, 2010, by the Department of Environmental Quality (Department). This permit is for an animal feed and bedding production operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

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

VW:EW
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2825-04

Mountain Meadows Pet Products, Inc.
P.O. Box 778
Lewistown, MT 59457

May 26, 2010

MONTANA AIR QUALITY PERMIT

Issued To: Mountain Meadows Pet Products, Inc.
P.O. Box 778
Lewistown, MT 59457

Montana Air Quality Permit: #2825-04
Administrative Amendment (AA) Request Received: 09/18/09
Department's Decision on AA: 05/10/10
Permit Final: 5/26/10
AFS #: 027-0006

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

SECTION I: Permitted Facilities

A. Plant Location

Mountain Meadows' manufacturing facility is located in Section 15, Township 15 North, Range 18 East, Fergus County, Montana. This facility grinds wheat straw and adds bentonite to produce pelleted animal bedding, and also manufactures animal feed products using alfalfa and grass hay as raw materials.

B. Current Permit Action

In 2005, Mountain Meadows added a new pellet cooling shack to vent uncontrolled emissions of particulate matter to atmosphere. In 2006 and 2007, Mountain Meadows constructed new additive storage bins which supply raw ingredients to the mixing circuit of the facility. The additive bins are located indoors and vent to the existing scale bin. Scale bin emissions are controlled by filter socks. In 2008, Mountain Meadows began manufacturing new feed products which use alfalfa and grass hay as raw materials. In addition to the new product lines, new product storage bins, new product conveying equipment, and new bulk product truck loadout facilities were installed at the facility. Emissions from the new product storage bins and from the new bulk product truck loadout facility are uncontrolled. On February 12, 2009, the Department of Environmental Quality (Department) received notification from Mountain Meadows regarding installation of a new blender to mix grains with finished feed pellets. On September 18, 2009, the Department received notification from Mountain Meadows regarding the installation of a new grinding raw material bin to give more efficiency when grinding instead of using tote bags. The new raw material bin eliminates the bear cat grinder system. Mountain Meadows also installed a valve packer for packaging ground products.

The current permit action is an administrative amendment pursuant to ARM 17.8.764 that updates the equipment list, rule references, emissions inventory, and permit format.

SECTION II: Limitations and Conditions

A. Emission Limits

1. Mountain Meadows shall operate and maintain:

- a cyclone and baghouse to control emissions from the straw grinders (ARM 17.8.752);
- a cyclone to control emissions from the primary dryer (ARM 17.8.752);
- a baghouse to control emissions from the batching scale house (ARM 17.8.749); and
- a baghouse to control emissions from the finished product screen (ARM 17.8.752).

2. Mountain Meadows shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources or stacks installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

3. Mountain Meadows 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).

4. Mountain Meadows shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).

B. Testing Requirements

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

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

C. Operational Reporting Requirements

1. Mountain Meadows shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

   Mountain Meadows shall submit the following (ARM 17.8.505):

   a. Amount of material received at the facility (tons)
   b. Amount of material processed at the facility (tons)
   c. Amount of fuel consumed by the dryer (million cubic feet ($MMft^3$))
   d. Vehicle miles traveled to calculate fugitive emissions
   e. Operation and Maintenance Program Reporting (ARM 17.8.749):

      For the dust control equipment report:

      i. Results of any opacity observations
      ii. Results of periodic inspections and any corrective action taken
      iii. Any malfunctions, including date, time, nature of malfunction, any corrective action taken, and any exceedances of any applicable opacity standard.

2. Mountain Meadows 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 Mountain Meadows as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – Mountain Meadows shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emission Monitoring Systems (CEMS) and 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 all the terms, conditions, and matters stated herein shall be deemed accepted if Mountain Meadows fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Mountain Meadows 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 as specified in Section 75-2-401 *et seq*., MCA.

E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Mountain Meadows 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
Mountain Meadows Pet Products, Inc.
MAQP #2825-04

I. Introduction/Process Description

Mountain Meadows Pet Products, Inc. (Mountain Meadows) owns and operates a pelleted animal bedding production facility and also manufactures animal feed products using alfalfa and grass hay as raw materials.

A. Permitted Equipment

This MAQP covers all existing sources of air emissions at the facility, including, but not limited to:

- Receiving area
- Tub Grinder
- Screen Grinder
- Ground straw cyclone for particulate from grinders
- Main Dust System Baghouse for particulate from ground straw cyclone
- Bagging and Screening Baghouse for particulate from finished product screen
- Filter Receiver for particulate from batching scale house
- Raw Ingredient Bins
- Grinding Raw Material Bin
- Raw Ingredient Batch Mixer
- Pelletizer
- Natural Gas Dryer
- Primary Dryer Cyclone
- Cooling Shed
- Finished Product Bins
- Blender
- Baggers/Scales
- Valve Packer
- Miscellaneous Screens, Conveyors, and Elevator Legs
- Shipping Area Dock
- Bulk Truck Loadout Area

B. Source Description

Mountain Meadows facility receives wheat straw, which is ground, screened, dried, added to bentonite, and pressed to form pellets used for animal bedding. Mountain Meadows also manufactures animal feed products using alfalfa and grass hay as raw materials.

C. Permit History

On April 8, 1994, Mountain Meadows applied for **MAQP #2825-00** to operate an animal bedding manufacturing plant located in Section 15, Township 15 North, Range 18 East, Fergus County, Montana. The grinders can grind approximately 3500 pounds per hour of straw while the pelletizer and the dryer have a maximum throughput capability of approximately 2800 pounds per hour of pellets.
MAQP modification #2825-01 was issued on September 29, 1995, for the installation of a

Donaldson Day filter and fan. This filter collects particulate emissions from the finished product screen, which previously were collected by the Carter Day baghouse. The overall result of the project was increased worker comfort and a reduction in particulate emissions from the facility.

On October 4, 1997, Mountain Meadow was issued a modification to MAQP #2825-01. The modification was for the removal of the annual testing requirements for the primary dryer cyclone, the Carter Day MMP Baghouse and the Semco DCTV filter receiver. The testing requirements on these facilities were established prior to the facility instituting a consistent testing policy. Based on the uncontrolled potential to emit, Department of Environmental Quality (Department) policy does not require continued testing on the Carter Day baghouse and the Semco filter receiver. Cyclones, by design, are extremely consistent control devices and the Department has determined that annual testing on the dryer cyclone is not justified.

Testing requirements that have already been completed have also been removed from the permit. This permitting action will not change actual or allowable emissions from the facility. **MAQP #2825-02** replaced MAQP #2825-01.

On September 12, 2002, the Department received a letter from Mountain Meadows indicating a change in the equipment at the facility. Mountain Meadows replaced the California Pellet Mill Duel Speed with a Pallidin 800 Pellet Mill. This mill has the capability to run 2 tons per hour and was installed for overall efficiency of the plant. Based on the information submitted, the modification results in potential emissions of less than 15 tons per year (TPY) and would not violate any conditions of MAQP #2825-02. Therefore, the replacement pellet mill was a de minimis change in accordance with Administrative Rules of Montana (ARM) 17.8.705 (l)(r). **MAQP #2825-03** replaced MAQP #2825-02.

D. Current Permit Action

In 2005, Mountain Meadows added a new product cooling shed which vents uncontrolled emissions of particulate matter to atmosphere. In 2006 and 2007, Mountain Meadows constructed new additive storage bins which supply raw ingredients to the mixing circuit of the facility. The additive bins are located indoors and vent to the existing scale bin. Scale bin emissions are controlled by filter socks. In 2008, Mountain Meadows began manufacturing new feed products which use alfalfa and grass hay as raw materials. In addition to the new product lines, new product storage bins, new product conveying equipment, and new bulk product truck loadout facilities were installed at the facility. Emissions from the new product storage bins and from the new bulk product truck loadout facility are uncontrolled.

On March 10, 2009, the Department issued Mountain Meadows a warning letter for failure to notify the Department of the equipment and/or changed in methods of operation that occurred between 2005 and 2008. The warning letter indicated that the potential emissions from the equipment and operations resulted in less than 15 TPY of potential emissions; therefore, their inclusion would fall under de minimis and not require a permit modification.

On February 12, 2009, the Department received notification from Mountain Meadows regarding installation of a new blender to mix grains with finished feed pellets.

On September 18, 2009, the Department received notification from Mountain Meadows regarding the installation of a new grinding raw material bin to give more efficiency when grinding instead of using tote bags. The new raw material bin eliminates the bear cat grinder system. Mountain Meadows also installed a valve packer for packaging ground products.
The current permit action is an administrative amendment pursuant to ARM 17.8.764 that updates the equipment list to reflect the addition of new equipment and changes in methods of operation

that have occurred since the issuance of MAQP #2825-03. In addition to accounting for the update to the equipment list, the permit updates the rule references, emissions inventory, and permit format. **MAQP #2825-04** replaces MAQP #2825-03.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This 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).

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

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

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction 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, Subchapter 2 – Ambient Air Quality, including, but not limited to:

The following ambient air quality standards or requirements may apply, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Mountain Meadows must maintain compliance with all applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Mountain Meadows shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

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

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

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

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR Part 60.

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. Mountain Meadows was not required to submit an application fee for the current permit action because the current permit action is considered an administrative 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 TPY of any pollutant. Mountain Meadows has a PTE greater than 25 TPY 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. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. On February 12, 2009, and September 18, 2009, the Department received a letter from Mountain Meadows regarding new equipment installation; these letters served as notification for the current permit action. Because the requested changes can be accomplished pursuant to the de minimis rule (ARM 17.8.745), no application is required. (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. Mountain Meadows was not required to publish a public notice because the current permit action is considered an administrative amendment.

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 Mountain Meadows 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.

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 since this facility is not a listed source and the facility's PTE is less than 250 TPY of any pollutant (excluding fugitive emissions). Therefore, the requirements of this program do not apply.

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. PTE > 100 TPY of any pollutant;

   b. PTE > 10 TPY of any one hazardous air pollutant (HAP), PTE > 25 TPY of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 TPY of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (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 #2825-04 for the Mountain Meadows facility, the following conclusions were made:

   a. The facility's PTE is less than 100 TPY for any pollutant.

   b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY for all HAPs.

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

   d. The facility is not subject to any current NSPS.

   e. The facility is not subject to any current NESHAP standards.

   f. The facility is not an EPA designated Title V source.

   g. This source is not a Title IV affected source, or a solid waste combustion unit.

Based on these facts, the Department determined that Mountain Meadows is a minor source of emissions as defined under Title V of the FCAA.

III. BACT Determination

A BACT determination is required for any new or modified source. Mountain Meadows shall install on the new or modified source 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 current permit action is considered an administrative permit action.

IV. Emissions Inventory

Tons/year						
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_2**
Receiving	0.15	0.02				
Grinding, Screening, Recycle	0.05	0.05				
Dryer	17.96	17.96				
Dryer Fuel Combustion	0.07	0.07	0.88	0.05	0.74	0.01
Bentonite Bin	0.35	0.26				
Bagging	4.82	4.82				
Valve Packer	0.05	0.03				
Scale Bin	0.02	0.01				
Pellet Cooling Shack	0.88	0.88				
Peach Bin	0.22	0.06				
Reg Bin	0.22	0.06				
Green Bin	0.22	0.06				
Spare Bin	0.22	0.06				
Rabbit/Horse Bin 1	0.22	0.06				
Rabbit/Horse Bin 2	0.22	0.06				
Spare Feed Bin	0.22	0.06				
Grinding Raw Materials Bin	0.22	0.06				
Blender	6.31	3.15				
Bulk Truck Loadout	0.09	0.02				
Haul Roads	2.48	0.64				
Total Emissions	**34.99**	**28.35**	**0.88**	**0.05**	**0.74**	**0.01**

Note: Emission factors in calculations below that are referenced by SCC and EPA WebFire were downloaded from http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main, via www.epa.gov/ttn/chief, WebFIRE (Factor Information Retrieval System), Technology Transfer Network, Clearinghouse for Inventories & Emissions Factors, accessed on 3/13/2009.

Receiving

Process Rate: 2.0 ton/hr (Maximum process Rate based on capacity of Pallidin 800 Pellet Mill)
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.017lb/ton (uncontrolled, AP-42, Table 9.9.1-2, 3/03)
Calculations: 0.017 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

PM_{10} Emissions:

Emission Factor: 0.0025lb/ton (uncontrolled, AP-42, Table 9.9.1-2, 3/03)
Calculations: 0.0025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

Grinding, Screening and Recycle

PM Emissions:
Emission Factor: 0.06 lb/ton (SCC 30200805, EPA WebFIRE, PM assumed equivalent to PM_{10})
Control Efficiency: 90% (cyclone / filter socks)
Calculations: 0.06 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.05 ton/yr

PM_{10} Emissions:
Emission Factor: 0.06 lb/ton (SCC 30200805, EPA WebFIRE)
Control Efficiency: 90% (cyclone / filter socks)
Calculations: 0.06 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.05 ton/yr

Dryer

PM Emissions:
Emission Factor: 4.1 lb/ton (SCC 30200115, EPA WebFIRE)
Control Efficiency: 50% (cyclone)
Calculations: 4.1 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.50 = 17.96 ton/yr

PM_{10} Emissions:
Emission Factor: 4.1 lb/ton (SCC 30200115, EPA WebFIRE, PM_{10} assumed equivalent to PM)
Control Efficiency: 50% (cyclone)
Calculations: 4.1 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.50 = 17.96 ton/yr

Dryer Fuel Combustion

Process Rate: 17.52 MMscf/yr

PM Emissions:
Emission Factor: 7.6 lb/MMscf (AP-42, Table 1.4-2, 7/98, all PM assumed 1.0 microns or smaller)
Control Efficiency: 0% (uncontrolled)
Calculations: 7.6 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.07 ton/yr

PM_{10} Emissions:
Emission Factor: 7.6 lb/MMscf (AP-42, Table 1.4-2, 7/98, all PM assumed 1.0 microns or smaller)
Control Efficiency: 0% (uncontrolled)
Calculations: 7.6 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.07 ton/yr

NO_x Emissions:
Emission Factor: 100 lb/MMscf (AP-42, Table 1.4-1, 7/98, uncontrolled small boiler)
Control Efficiency: 0% (uncontrolled)
Calculations: 100 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.88 ton/yr

CO Emissions:
Emission Factor: 84 lb/MMscf (AP-42, Table 1.4-1, 7/98, uncontrolled small boiler)
Control Efficiency: 0% (uncontrolled)
Calculations: 84 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.74 ton/yr

VOC Emissions:
Emission Factor: 5.5 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Control Efficiency: 0% (uncontrolled)
Calculations: 5.5 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.05 ton/yr

SO_2 Emissions:
Emission Factor: 0.6 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.6 lb/MMscf * 17.52 MMscf/yr * 0.0005 ton/lb = 0.01 ton/yr

Bentonite Bin

PM Emissions:
Emission Factor: 0.04 lb/ton (SCC 30302307, EPA WebFIRE)
Control Efficiency: 0% (filter socks are voluntarily used as process equipment)
Calculations: 0.04 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.35 ton/yr

PM_{10} Emissions:
Emission Factor: 0.04 lb/ton (SCC 30302307, EPA WebFIRE)
Control Efficiency: 0% (filter socks are voluntarily used as process equipment)
Calculations: 0.03 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.26 ton/yr

Bagging

PM Emissions:
Emission Factor: 5.5 lb/ton (SCC 30200804, EPA WebFIRE)
Control Efficiency: 90% (filter socks)
Calculations: 5.5 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 4.82 ton/yr

PM_{10} Emissions:
Emission Factor: 5.5 lb/ton (SCC 30200804, EPA WebFIRE, PM_{10} assumed equivalent to PM)
Control Efficiency: 90% (filter socks)
Calculations: 5.5 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 4.82 ton/yr

Valve Packer

PM Emissions:
Emission Factor: 0.061 lb/ton (SCC 30200530, AP-42, Table 9.9.1-1)
Control Efficiency: 90% (filter socks)
Calculations: 0.061 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.05 ton/yr

PM_{10} Emissions:
Emission Factor: 0.034 lb/ton (SCC 30200530, AP-42, Table 9.9.1-1)
Control Efficiency: 90% (filter socks)
Calculations: 0.034 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.03 ton/yr

Scale Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 90% (filter socks)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.02 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 90% (filter socks)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.01 ton/yr

Pellet Cooling Shack

PM Emissions:
Emission Factor: 0.1 lb/ton (SCC 30200806, EPA WebFIRE, PM assumed equivalent to PM_{10})
Control Efficiency: 0% (uncontrolled)
Calculations: 0.1 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.88 ton/yr

PM_{10} Emissions:
Emission Factor: 0.1 lb/ton (SCC 30200806, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.1 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb * 0.10 = 0.88 ton/yr

Peach Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Reg Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Green Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Spare Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr
PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Rabbit/Horse Bin 1

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Rabbit/Horse Bin 2

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Spare Feed Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:
Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Grinding Raw Materials Bin

PM Emissions:
Emission Factor: 0.025 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.025 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions:

Emission Factor: 0.0063 lb/ton (SCC 30200540, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0063 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

Blender

PM Emissions:

Emission Factor: 0.72 lb PM / ton material processed (AP-42, Table 9.9.1-2, PARTICULATE EMISSION FACTORS FOR GRAIN PROCESSING FACILITIES. The PM emission factor for Animal Feed Mills, Pelletizing/Pellet Cooler (SCC 3-02-008-16), is 0.36 lb/ton with cyclone control. Assuming the cyclone provides 50% control, the uncontrolled emission factor could be estimated at 0.72 lb/ton for PM.)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.72 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 6.3 ton/yr

PM_{10} Emissions:

Emission Factor: 0.36 lb PM / ton material processed (AP-42, Table 9.9.1-2, PARTICULATE EMISSION FACTORS FOR GRAIN PROCESSING FACILITIES. The PM emission factor for Animal Feed Mills, Pelletizing/Pellet Cooler (SCC 3-02-008-16), is 0.36 lb/ton with cyclone control. Assuming the cyclone provides 50% control, the uncontrolled emission factor could be estimated at 0.72 lb/ton for PM. Per AP-42 footnote, the PM_{10} emission factor can be estimated as 50% of the PM emission factor.)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.36 lb/ton * 2.0 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 3.15 ton/yr

Bulk Truck Loadout

PM Emissions:

Emission Factor: 0.0033 lb/ton (SCC 30200803, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0033 lb/ton * 6.5 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.09 ton/yr

PM_{10} Emissions:

Emission Factor: 0.0008 lb/ton (SCC 30200803, EPA WebFIRE)
Control Efficiency: 0% (uncontrolled)
Calculations: 0.0008 lb/ton * 6.5 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

Haul Roads

Vehicle Miles Traveled (VMT) per Day = 9 VMT/day (Based on 3300 VMT per year)
VMT per hour = (9 VMT/day) * (day/24 hrs) = 0.38 VMT/hr
Hours of Operation = 8,760 hrs/yr
Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

PM Emissions:

Emission Factor = $k * (s / 12)^a * (W / 3)^b$ = 3.02 lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content = 5 % (AP 42, Table 13.2.2-1, 11/06)
W = mean vehicle weight = 4 tons (estimate)
a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)
Control Efficiency = 50% (Water spray)
Calculation: (8760 hrs/yr) * (0.38 VMT/hr) * (3.02 lb/VMT) * (ton/2000 lb) * (1-50/100) = 2.48

tons/yr

PM_{10} Emissions:

Emission Factor = k * (s / 12)^a * (W / 3)^b = 0.78 lb/VMT

Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content = 5 % (AP 42, Table 13.2.2-1, 11/06)
W = mean vehicle weight = 4 tons (estimate)
a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)

Control Efficiency = 50% (Water spray)

Calculation: (8760 hrs/yr) * (0.38 VMT/hr) * (0.78 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.64 tons/yr

V. Existing Air Quality

The Mountain Meadows facility is located in an area that is considered unclassified/attainment with respect to National Ambient Air Quality Standards (NAAQS).

VI. Air Quality Impacts

The Department has reviewed the changes Mountain Meadows has made since 2005 and has calculated the PTE associated with those changes. Based on the Department's analysis, the changes amount to an increase of less than 15 TPY of any regulated pollutant. The Department determined that those changes are de minimis per ARM 17.8.745 and the increase in emissions associated with this current permit action will cause minimal air quality impacts. There are no significant emissions of toxic air pollutants from this source. Therefore, the Department does not believe that this source will cause or contribute to a violation of any ambient standard.

VII. Takings 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

YES	NO	
		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 was not required for the current permit action because it is considered an administrative action.

Analysis Prepared by: Ed Warner
Date: April 13, 2010