

DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMITTING AND COMPLIANCE DIVISION

Air and Waste Management Bureau



MARC RACICOT, GOVERNOR

(406) 444-3490
FAX (406) 444-1499

STATE OF MONTANA

OFFICE: METCALF BUILDING
ADDRESS: 1520 E 6TH AVENUE

PO BOX 200901
HELENA, MONTANA 59620-0901

August 2, 1999

Scott Chavez
Land O'Lakes/Harvest States Feeds
5325 10th Avenue North
Great Falls, Montana 59405-1089

Dear Mr. Chavez:

Air Quality Permit #2842-01 is deemed final as of July 31, 1999 by the Department of Environmental Quality. This permit is for a grain processing facility. 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,

A handwritten signature in black ink, appearing to read "Richard Knatterud".

Richard Knatterud
Air Permitting Section Supervisor

RK:bjd

Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Air Quality Permit #2842-01

Land o'Lakes/Harvest States Feeds
5325 10th Avenue North
Great Falls, Montana 59405-1089

July 31, 1999



AIR QUALITY PERMIT

Issued to: Land O'Lakes/Harvest States Feeds Permit: #2842-01
5325 10th Ave. North Modification Request Received: 06/22/99
Great Falls, MT 59405-1089 Dept Decision on Modification: 07/15/99
Final Permit Issued: 07/31/99
AFS#: 013-0015

An air quality permit, with conditions, is hereby granted to the above-named permittee, hereinafter referred to as "Land O'Lakes," 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

The Legal location of this facility is Section 10, Township 20 North, Range 3 East, Cascade County, Montana.

B. Permitted Facility

This facility processes a variety of grains for use as animal feeds. The process includes grain receiving, grinding and forming the grain into pellets, and then shipping the pellets (which are animal feed) out in bulk or bags. A complete list of equipment can be found in the permit analysis section of this permit.

C. Current Permit Action

On June 22, 1999, the Department of Environmental Quality (department) received a request to modify permit #2842-00. The modification is to transfer the facility name from GTA Feeds to Land O'Lakes/Harvest States Feeds. Also, a steam rolling process line is to be added to the facility, this addition is done under ARM 17.8.705(1)(r). Permit #2842-01 replaces permit #2842-00.

SECTION II: Conditions and Limitations

A. Emission Control Requirements and Limitations

1. Land O'Lakes shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six (6) consecutive minutes (ARM 17.8.304).
2. Land O'Lakes shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six (6) consecutive minutes (ARM 17.8.304).

3. Land O'Lakes 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 and ARM 17.8.710).
4. Land O'Lakes shall treat all unpaved portions of the access roads, parking lots, and general plant area with fresh water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation (ARM 17.8.710).
5. Land O'Lakes shall not cause or authorize the production, handling, transportation or storage of any material unless reasonable precautions to control particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exceed an opacity of 20% or greater averaged over six (6) consecutive minutes (ARM 17.8.308).

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 further testing (ARM 17.8.105).

C. Operational and Emission Inventory Reporting Requirements

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

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

Land O'Lakes shall notify the department of any construction improvement project conducted, pursuant to ARM 17.8.705(1)(r), 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 the department, in writing, 10 days prior to start up or use of the proposed deminimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the deminimis change, and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).

2. All records compiled in accordance with this permit must be maintained by Land O'Lakes as a permanent business record for at least five years following the date of the measurement, must be available at the plant site for inspection by the department and must be submitted to the department upon request (ARM 17.8.710).

SECTION III: General Conditions

- A. Inspection – Land O'Lakes shall allow the department representatives access to the source at all times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, 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 Land O'Lakes fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Land O'Lakes of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).
- 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 fifteen (15) days after the department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review. A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The department's decision on the application is not final unless fifteen (15) days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the department's decision until the conclusion of the hearing and issuance of a final decision by the Board of Environmental Review.
- F. Permit Inspection – As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Land O'Lakes may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board of Environmental Review.

PERMIT ANALYSIS
Land O'Lakes/Harvest States Feeds
Permit #2842-01

I. Introduction/Process Description

A. Site Location

The Legal location of this facility is Section 10, Township 20 North, Range 3 East, Cascade County, Montana.

B. Source Description

This facility receives various grains and produces feed used for livestock feed. The grain is received via truck and rail car; then it is ground and stored for future use. From this point, it is transported to a pelletizer and then shipped out as product in bulk or bags.

Equipment used at this facility includes, but is not limited to:

1. Grain Receiving (3 pits);
2. 2 Elevator Legs (Enclosed and Vented to a Cyclone);
3. 8 Grinding Bins;
4. 29 Receiving Bins;
5. Hammermill (Vented to a baghouse);
6. Mixing Scale;
7. 2 Mixing Legs (Enclosed);
8. Block Machine;
9. Pelletizer/Cooler (Vented to a Cyclone);
10. Bulk Loadout;
11. Natural Gas Boiler; and
12. Steam Rolling Process line.

C. Permit History

On May 13, 1976, GTA Feeds (GTA) received permit #67-051376 and permit #66-051376 from the Cascade County Health Department for the operation of a grain elevator and animal feed manufacturing facility. On July 27, 1994, by order of the Board of Environmental Review, the Cascade County Air Pollution Control Program reverted its air quality permitting program to the Montana Department of Environmental Quality (department). Therefore, the department re-issued all Cascade County Air Quality permits as department permits. Permit #2842-00 replaced any Cascade County permits held by GTA.

D. Current Permit Action

On June 22, 1999, the department received a request to modify permit #2842-00. The modification is to transfer the facility name from GTA Feeds to Land O'Lakes/Harvest States Feeds. Also, a steam-rolling process line is to be added to the facility, this is done under ARM 17.8.705(1)(r). Permit #2842-01 replaces permit #2842-00.

E. Additional Information

Additional information, such as applicable rules and regulations, BACT determinations, air quality impacts, and environmental assessments are 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 which apply to the facility. The complete rules are stated in the Administrative Rules of Montana 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 17.8.101, *et seq.* (Subchapter 1), General Provisions, including, but not limited to:

1. ARM 17.8.101, Definitions. This section includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105, Testing Requirements. Any person or persons responsible for the emissions 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.

The department may require testing at this facility.

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.*, MCA.

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

4. ARM 17.8.110, Malfunctions. (2) The department must be notified promptly by phone 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 four (4) hours.
5. ARM 17.8.111, Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant 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 17.8.201, *et seq.* (Subchapter 2), Ambient Air Quality. The following ambient air quality standards or requirements apply, including, but not limited to:

1. ARM 17.8.210, Ambient Air Quality Standards for Sulfur Dioxide,
ARM 17.8.211, Ambient Air Quality Standards for Nitrogen Dioxide,
ARM 17.8.212, Ambient Air Quality Standards for Carbon Monoxide,
ARM 17.8.213, Ambient Air Quality Standard for Ozone,
ARM 17.8.214, Ambient Air Quality Standard for Hydrogen Sulfide,
ARM 17.8.220, Ambient Air Quality Standard for Settled Particulate Matter,
ARM 17.8.221, Ambient Air Quality Standard for Visibility,
ARM 17.8.222, Ambient Air Quality Standard for Lead, and
ARM 17.8.223, Ambient Air Quality Standard for PM₁₀.

Land O'Lakes must maintain compliance with the applicable ambient air quality standards. Because there will not be an increase in allowable emissions caused by this permit action, the department believes it will not lead to a violation of ambient air quality standards.

C. ARM 17.8.301, *et seq.* (Subchapter 3), Emission Standards, including, but not limited to:

1. ARM 17.8.304, Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into an outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308, Particulate Matter, Airborne. (1) This section requires an opacity limitation of 20% for all fugitive emissions sources and that reasonable precautions be taken to control emissions of airborne particulate.

(2) Under this section, Land O'Lakes 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 a limitation of particulate emissions caused by the combustion of fuel which is to be discharged from any stack or chimney into the atmosphere not to exceed the hourly rate outlined in this rule.
4. ARM 17.8.322, Sulfur Oxide Emissions-Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel-containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. The natural gas burned in the boiler is of pipeline quality; therefore, this facility will be in compliance with this rule.
5. ARM 17.8.340, Standards of Performance for New Stationary Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. 40 CFR 60, Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to all affected facilities constructed, modified, or reconstructed after June 9, 1989 and that have maximum design heat input capacity of 100 million Btu/hr or less, but greater than 10 million Btu/hr. The Clever Brooks boiler used at this facility was manufactured prior to June 9, 1989; therefore, 40 CFR Part 60, Subpart Dc does not apply to this source.

Subpart DD-Standards of Performance for Grain Elevators applies to all affected facilities constructed, modified, or reconstructed after August 3, 1978 that have the capacity to store 1 million bushels of grain. This facility does not have the ability to store greater than 1 million bushels of grain; therefore, 40 CFR Part 60, Subpart DD does not apply to this facility.

D. ARM 17.8.501, *et seq.* (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 section 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. Land O'Lakes was not required to submit a permit fee for the current permit modification.
2. ARM 17.8.505, Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the department; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, as 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 17.8.701, *et seq.* (Subchapter 7), Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.701, Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.704, General Procedures for Air Quality Preconstruction Permitting. This air quality preconstruction permit contains requirements and conditions applicable to both construction and subsequent use of the permitted equipment.
3. ARM 17.8.705, When Permit Required, Exclusions. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use any air contaminant sources which have the potential to emit more than 25 tons per year of any pollutant. Land O'Lakes has the potential to emit more than 25 tons per year of particulate matter and PM-10; therefore, a permit is required.
4. ARM 17.8.710, Condition of Issuance of Permit. This section requires that a source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Land O'Lakes has demonstrated compliance with applicable rules and standards as required for permit issuance.

5. ARM 17.8.715, Emission Control Requirements. This section requires a source to install the maximum air pollution control capability which is technically practicable and economically feasible, except that best available control technology (BACT) shall be utilized. Because there will not be an increase in emissions due to the current permit modification, a BACT analysis was not required.
 6. ARM 17.8.716, 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.
 7. ARM 17.8.717, Compliance with Other Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving Land O'Lakes of the responsibility for complying with any applicable federal and Montana statutes, rules and standards, except as specifically provided in ARM 17.8.101, *et seq.*
 8. ARM 17.8.720, Public Review of Permit Applications. 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. Because there will not be an increase in emissions due to the current permit modification, a public notice was not required.
 9. ARM 17.8.731, Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one (1) year after the permit is issued.
 10. ARM 17.8.733, Modification of Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the board or changed conditions of operation at a source or stack which do not result in an increase in emissions because of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
 11. ARM 17.8.734, Transfer of Permit. This section states 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 17.8.801, et seq. (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.

This facility is not a PSD source since this facility is not a listed source and the site's potential to emit is below 250 tons per year of any pollutant.

III. BACT Determination

A Best Available Control Technology (BACT) determination is required for each new or altered source. Land O'Lakes shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that best available control technology shall be utilized. Because there will not be an increase in emissions due to the current permit modification, a BACT analysis was not required. However, existing controls at the facility will remain.

IV. Emission Inventory

Source	PM	PM-10	NO _x	VOC	CO	SO _x
Clever-Brooks Boiler	0.0203	0.0203	0.45	0.0261	0.0945	0.0027
Grain Receiving	76.87	19.25				
Internal Operations (2 Elevator Legs)	22.56	5.47				
Precleaning/handling (Grinding Bins)	0.04	0.01				
Precleaning/handling (Receiving Bins)	0.56	0.14				
Hammermill	0.28	0.28				
Internal Operations (2 Elevator Legs)	3.15	0.79				
Block Machine	13.80	3.94				
Pelletizer/Cooler	16.95	8.67				
Bulk Loadout	4.70	1.28				
Haul Roads	0.56	0.25				
Previous TOTAL	139.49	40.10	0.45	0.03	0.10	0.003
New Steam Rolling Process	8.76	8.76				
TOTAL	148.25	48.86	0.45	0.03	0.10	0.003

V. Existing Air Quality and Ambient Air Impact Analysis

In the view of the department, the amount of controlled emissions from this facility will cause minimal air quality impacts. There are no significant emissions of toxic air pollutants from this source. Therefore, the department does not believe this source will cause or contribute to a violation of any ambient standard.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications.

VII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility; therefore, an environmental assessment is not required for this administrative action.

Analysis Prepared by: Lana Hedlund
Date: July 9, 1999