

**AIR EMISSION PERMIT NO. 04900029-002**

**IS ISSUED TO**

Land O'Lakes, Inc.

**LAND O'LAKES - PINE ISLAND**

206 2nd Street Northeast  
Pine Island, Goodhue County, MN 55963

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issuance Date	Action Number
Registration Permit Option D	January 19, 1995	February 6, 1995	04900029-001
Installation/Operation Permit	February 21, 1996	March 18, 1997	138000029-006
Total Facility Operating Permit	February 21, 1996	See Below	04900029-002

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** State; Limits to Avoid Part 70 and NSR

**Issue Date:** August 6, 2003

**Expiration:** Permit does not expire  
All Title I Conditions do not expire.

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Ann M. Foss  
Major Facilities Section Manager  
Majors And Remediation Division

for Sheryl A. Corrigan  
Commissioner  
Minnesota Pollution Control Agency

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**NOTICE TO THE PERMITTEE:**

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

**PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

**FACILITY DESCRIPTION:**

This facility makes dried cheese and whey powders. The facility is composed of three boilers, two cheeses dryers, and one whey dryer/re-dryer system. Product is collected by a pair of parallel cyclones for each cheese dryer, and by a cyclone for the whey dryer and another cyclone for the whey re-dryer. Emissions from each pair of cheese collection cyclones are vented to a venturi scrubber and then to the atmosphere. Emissions from the whey dryer cyclone and the whey re-dryer cyclone are vented to separate venturi scrubbers, and then to the atmosphere.

The Permittee also conducts cheese powder/whey powder bagging, whey sifting, whey loadout, and dry blending.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.**

**Subject Item: Total Facility**

<b>What to do</b>	<b>Why to do it</b>
<b>OPERATIONAL REQUIREMENTS</b>	hdr
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment and Product Collection Equipment: Operate all pollution control and product collection equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control and product collection equipment. At a minimum, the O & M plan shall identify all air pollution control and product collection equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the equipment, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
<b>PERFORMANCE TESTING</b>	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals:  Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.  Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test  The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
<b>MONITORING REQUIREMENTS</b>	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
<b>RECORDKEEPING</b>	hdr
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
<b>REPORTING/SUBMITTALS</b>	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.  At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.  At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). The report shall be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island  
Permit Number: 04900029 - 002

Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
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**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** GP 001 Boilers**Associated Items:** EU 001 Main Boiler #1 (32 mmBtu/hr)

EU 002 Main Boiler #2 (27 mmBtu/hr)

EU 003 Backup Boiler

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input for each emission unit in GP 001. Potential emissions of particulate matter from residual oil combustion (the highest particulate matter-emitting fuel) are 0.13 lb/mmBtu.	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 90 tons/year using 12-month Rolling Sum for total GP 001 sulfur dioxide emissions from fuel oil combustion.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Permitted Fuel Types: Natural gas, distillate fuel oil, and residual fuel oil.	Minn. R. 7007.0800, subp. 2
Fuel Sulfur Content: less than or equal to 1.6% by weight for residual fuel oil and less than or equal to 0.5% by weight for distillate fuel oil.	Minn. R. 7007.0800, subp. 2
MONITORING AND RECORDKEEPING	hdr
Daily Fuel Oil Usage Monitoring and Recordkeeping: Once each day the Permittee shall calculate and record the total GP 001 usage (in gallons) of each of the two permitted types of fuel oil, for the previous day.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 4 and 5
Monitoring and Recordkeeping - Monthly Fuel Oil Usage: By the 15th day of each month, the Permittee shall calculate and record the total GP 001 usage of each of the two permitted types of fuel oil, in gallons per month, for the previous month and the previous 12-month period.	Minn. R. 7007.0800, subp. 4 and 5
<p>Sulfur Dioxide Emission Calculations: By the 15th day of each month, the Permittee shall calculate and record the 12-month rolling sum sulfur dioxide emissions using the following equation:</p> $SO_2 = [(0.2544 \text{ lb/gallon} * RO) + (0.072 \text{ lb/gallon} * DO)] * 0.0005$ <p>where:</p> <p>SO<sub>2</sub> = tons of sulfur dioxide emitted from oil combustion in the previous 12 months  RO = gallons of residual fuel oil combusted in the previous 12 months  DO = gallons of distillate fuel oil combusted in the previous 12 months  0.0005 = pounds to tons conversion factor</p>	Minn. R. 7007.0800, subp. 4 and 5
Fuel Oil Supplier Certification: For each fuel oil delivery, the Permittee shall obtain from the fuel supplier a certification indicating actual or maximum percent by weight sulfur content in the fuel oil. The Permittee shall maintain each certification for a minimum of five years.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** GP 002 Dryers - Propane Limit

**Associated Items:** EU 004 Whey Spray Dryer & Primary Cyclone  
EU 005 Whey Spray Redryer & Redry Cyclone  
EU 006 Cheese Spray Dryer #1  
EU 011 Cheese Spray Dryer #2

What to do	Why to do it
Propane Fuel Usage: less than or equal to 5178646 gallons/year using 12-month Rolling Sum	Minn. R. 7007.0800, subp. 2
Permitted Fuel Types: Natural gas and propane	Minn. R. 7007.0800, subp. 2
Daily Propane Usage Monitoring and Recordkeeping: Once each day the Permittee shall calculate and record the total GP 002 usage (in gallons) of propane, for the previous day.	Minn. R. 7007.0800, subp. 4 and 5
Monitoring and Recordkeeping - Monthly Propane Usage: By the 15th day of each month, the Permittee shall calculate and record the total GP 002 propane usage, in gallons, for the previous month and the previous 12-month period.	Minn. R. 7007.0800, subp. 4 and 5



# TABLE A: LIMITS AND OTHER REQUIREMENTS

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** GP 003 Venturi Scrubbers

**Associated Items:** CE 004 Venturi Scrubber  
CE 005 Venturi Scrubber  
CE 006 Venturi Scrubber  
CE 011 Venturi Scrubber  
EU 004 Whey Spray Dryer & Primary Cyclone  
EU 005 Whey Spray Redryer & Redry Cyclone  
EU 006 Cheese Spray Dryer #1  
EU 011 Cheese Spray Dryer #2

What to do	Why to do it
The Permittee shall operate and maintain each venturi scrubber such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 90 percent control efficiency	Title I Condition: To avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain each venturi scrubber such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain each venturi scrubber at all times when the dryer it controls is in operation.  CE 004 is the venturi scrubber for EU 004 whey dryer CE 005 is the venturi scrubber for EU 005 whey redryer CE 006 is the venturi scrubber for EU 006 cheese dryer #1 CE 011 is the venturi scrubber for EU 011 cheese dryer #2	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain each venturi scrubber in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate for each venturi scrubber as required by this permit. The monitoring equipment must be installed, in use, and properly maintained for each venturi scrubber when in operation.	Minn. R. 7007.0800, subp. 4
Pressure Drop: Not less than 4.0 inches wc for for each scrubber unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the pressure drop recorded during the most recent MPCA approved performance test where compliance was demonstrated.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 14
Water Flow Rate: Not less than  100 gallons per minute for CE 004; 100 gallons per minute for CE 005; 160 gallons per minute for CE 006; 200 gallons per minute for CE 011;  unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the water flow rate recorded during the most recent MPCA approved performance test where compliance was demonstrated.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 14
Venturi Scrubber Daily Monitoring: Once each day of operation, the Permittee shall monitor and record the pressure differential and water flow rate for each venturi scrubber.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 4 and 5
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturer, the Permittee shall inspect the components of each venturi scrubber. The Permittee shall maintain a written record of the results of each inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

<p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"><li>- any pressure drop is below the required minimum;</li><li>- any water flow rate is below the permitted minimum; or</li><li>- any venturi scrubber or any of their components are found during any inspection to need repair.</li></ul> <p>Corrective actions shall return the pressure drop to within the permitted range, return the water flow rate to at least the permitted minimum, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O &amp; M Plan for the venturi scrubber. The Permittee shall keep a record of the type and date of any corrective action taken.</p>	<p>Minn. R. 7007.0800, subp. 4, 5, and 14</p>
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**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** GP 004 Fabric Filters (that emit to the atmosphere)**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 013 Fabric Filter - Low Temperature, i.e., T&lt;180 Degrees F

EU 009 Whey Bagging/Bulk Loadout (SV 009 &amp; CE 009)

EU 013 Dry Blending (SV 013 &amp; CE 013)

What to do	Why to do it
The Permittee shall operate and maintain each fabric filter so that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21
The Permittee shall operate and maintain each fabric filter so that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21
The Permittee shall operate and maintain each fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain each fabric filter at all times that the emission unit controlled by the filter is in operation.  CE 009 is the fabric filter for EU 009 whey bagging/bulk loadout CE 013 is the fabric filter for EU 013 dry blending	Title I Condition: To avoid classification as a major source and modification under 40 CFR Sections 52.21
Pressure Drop: greater than or equal to 1 inches of water column and less than or equal to 6 inches of water column for each fabric filter, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
Visible Emissions: The Permittee shall check the stack for each fabric filter (SV 009 and SV 013) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Sections 52.21
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit	Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Sections 52.21
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the components of each fabric filter. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:  - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair.  Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 004 Whey Spray Dryer & Primary Cyclone**Associated Items:** CE 004 Venturi Scrubber

GP 002 Dryers - Propane Limit

GP 003 Venturi Scrubbers

SV 004 Whey Spray Dryer &amp; Primary Cyclone

What to do	Why to do it
LIMITS AND OPERATING REQUIREMENTS	hdr
Particulate Matter < 10 micron: less than or equal to 1.04 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 1.04 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Permitted Fuel: Natural gas and propane.	Minn. R. 7007.0800, subp. 2
PERFORMANCE TESTING	hdr
Performance Test: due 180 days after Permit Issuance to measure SV 004 PM10 emissions. See Subject Item Total Facility for additional performance testing requirements.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 005 Whey Spray Redryer & Redry Cyclone**Associated Items:** CE 005 Venturi Scrubber

GP 002 Dryers - Propane Limit

GP 003 Venturi Scrubbers

SV 005 Whey Spray Dryer &amp; Redry Cyclone

What to do	Why to do it
LIMITS AND OPERATING REQUIREMENTS	hdr
Particulate Matter < 10 micron: less than or equal to 1.31 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 1.31 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Permitted Fuel: Natural gas and propane.	Minn. R. 7007.0800, subp. 2
PERFORMANCE TESTING	hdr
Performance Test: due 180 days after Permit Issuance to measure SV 005 PM10 emissions. See Subject Item Total Facility for additional performance testing requirements.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 006 Cheese Spray Dryer #1**Associated Items:** CE 006 Venturi Scrubber

GP 002 Dryers - Propane Limit

GP 003 Venturi Scrubbers

SV 006 Cheese Spray Dryer #1

What to do	Why to do it
LIMITS AND OPERATING REQUIREMENTS	hdr
Particulate Matter < 10 micron: less than or equal to 7.5 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 7.5 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Permitted Fuel: Natural gas and propane.	Minn. R. 7007.0800, subp. 2
PERFORMANCE TESTING	hdr
Performance Test: due 180 days after Permit Issuance to measure SV 006 PM10 emissions. See Subject Item Total Facility for additional performance testing requirements.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 009 Whey Bagging/Bulk Loadout (SV 009 & CE 009)**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 004 Fabric Filters (that emit to the atmosphere)

SV 009 Whey Bagging Dust

What to do	Why to do it
Total Particulate Matter: less than or equal to 1.75 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 1.75 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 011 Cheese Spray Dryer #2**Associated Items:** CE 011 Venturi Scrubber

GP 002 Dryers - Propane Limit

GP 003 Venturi Scrubbers

SV 011 Cheese Spray Dryer #2

What to do	Why to do it
LIMITS AND OPERATING REQUIREMENTS	hdr
Particulate Matter < 10 micron: less than or equal to 7.5 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 7.5 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Permitted Fuel: Natural gas and propane.	Minn. R. 7007.0800, subp. 2
PERFORMANCE TESTING	hdr
Performance Test: due 180 days after Permit Issuance to measure SV 011 PM10 emissions. See Subject Item Total Facility for additional performance testing requirements.	Title I Condition: To avoid major source status under 40 CFR Sections 52.21; Minn. R. 7017.2020, subp. 1



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

**Subject Item:** EU 013 Dry Blending (SV 013 & CE 013)**Associated Items:** CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 004 Fabric Filters (that emit to the atmosphere)

SV 013 Dry Blending

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.88 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 0.88 lbs/hour	Title I Condition: To avoid major source status under 40 CFR Sections 52.21
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)

## TABLE B: SUBMITTALS

08/06/03

Facility Name: Land O'Lakes - Pine Island  
Permit Number: 04900029 - 002

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor  
Permit Section  
Air Quality Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor  
Compliance Determination Unit  
Air Quality Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak  
Air and Radiation Branch  
EPA Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue NW (6204N)  
Washington, D.C. 20460

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

What to send	When to send	Portion of Facility Affected
Testing Frequency Plan	due 60 days after Initial Performance Test for SV 004 PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12-month), 36-month, and 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU004
Testing Frequency Plan	due 60 days after Initial Performance Test for SV 005 PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12-month), 36-month, and 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU005
Testing Frequency Plan	due 60 days after Initial Performance Test for SV 006 PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12-month), 36-month, and 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU006
Testing Frequency Plan	due 60 days after Initial Performance Test for SV 011 PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12-month), 36-month, and 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU011

**TABLE B: RECURRENT SUBMITTALS**

08/06/03

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Certification shall be submitted to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility

## APPENDIX

Facility Name: Land O'Lakes - Pine Island

Permit Number: 04900029-002

### Insignificant Activities

Emission Unit	Required to be listed?	IA rule	Applicable Minn. R
EU 007: Whey Sifting/Granular Bagging - fabric filter vents indoors only	Yes	Minn. R. 7007.1300, subp. 3.D.(2)	Minn. R. 7011.0700 - 7011.0735
EU 008: Whey Bulk Loadout Silos - fabric filter vent indoors only	Yes	Minn. R. 7007.1300, subp. 3.D.(2)	Minn. R. 7011.0700 - 7011.0735
EU 010: Cheese Bagging #1 - no control/vents indoors only	No	Minn. R. 7007.1300, subp. 2.D.(3)	Minn. R. 7011.0700 - 7011.0735
EU 012: Cheese Bagging #2 - no control/vents indoors only	No	Minn. R. 7007.1300, subp. 2.D.(3)	Minn. R. 7011.0700 - 7011.0735

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**DRAFT AIR EMISSION PERMIT NO. 04900029-002**

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

## **1. General Information**

### **1.1. Applicant and Stationary Source Location:**

Owner and Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 2022)
Land O'Lakes, Inc. P.O. Box 64101 St. Paul, MN 55164-0101 Eric Tiegen (651) 766-1346	206 2 <sup>nd</sup> Street NE Pine Island Goodhue County

### **1.2. Description of the facility**

This facility makes dried cheese and whey powders. The facility is composed of 3 boilers, 2 cheeses dryers, and one whey dryer/re-dryer system. Cheese is dried in two separate cheese dryers, and whey is dried in a whey dryer and then again in a whey re-dryer.

Product is collected by a pair of parallel cyclones for each cheese dryer, and by a cyclone for the whey dryer and another cyclone for the whey re-dryer. Emissions from each pair of cheese collection cyclones are vented to a venturi scrubber and then to the atmosphere. Emissions from the whey dryer cyclone and the whey re-dryer cyclone are vented to separate venturi scrubbers, and then to the atmosphere.

The Permittee also conducts cheese powder/whey powder bagging, whey sifting, whey loadout, and dry blending.

GI - 02 Product Flow Description: The following information clarifies the process flow for dried whey.

EU 007 is whey sifting/granular bagging. From whey sifting, depending on the packaging needed, product can go to granular bagging or to two bulk bins. CE 007 is a fabric filter baghouse that serves dust collection needs for both the whey sifter and the granular bagging. CE 007 is rated at 1500 cubic feet per minute (cfm) and discharges

inside the building. EU 007 is an insignificant activity required to be listed by Minn. R. 7007.1300, subp. 3.D.(2).

The two bulk bins are listed as EU 008. Each bulk bin has a fabric filter baghouse which then discharges to another baghouse listed as CE 008. CE 008 is rated at 1500 cfm and discharges inside the building. EU 008 is an insignificant activity required to be listed by Minn. R. 7007.1300, subp. 3.D.(2).

From the EU 008 two bulk bins, product can go to EU 009 bulk truck loadout/bagging line. A single baghouse serves both the bagging or bulk loadout (note, bulk loadout and bagging can not happen at the same time). This single baghouse, CE 009, is rated at 1500 cfm. CE 009 discharges outside to SV 009.

### 1.3. Description of any changes allowed with this permit issuance

No changes are allowed by this permitting action.

### 1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

Permit Number and Issuance Date	Action Authorized
April 22, 1999	Revocation of Option D Registration Permit
No. 138000029-006 (787R-96-I/O-1) March 18, 1997	Construct and operate Cheese Dryer No. 2 (EU 011)
No. 04900029-001 February 6, 1995	Option D registration permit
787R-91-OT-2 June 10, 1991	Construct and operate Cheese Dryer No. 1 (EU 006)

### 1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Pb tpy	Total HAPs tpy
Total Facility Limited Potential Emissions	96.4	95.5	94.1	95.0	53.2	15.6	0.002	0.06
Total Facility Actual Emissions*	6.93	4.95	15.6	14.9	8.83	0.31	NR	NR

\* 2001 Emission Inventory; NR = not reported

Table 2. Facility and Permit Classification

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD		PM, PM <sub>10</sub> , SO <sub>2</sub>	NO <sub>x</sub> , VOC, Pb, CO
Part 70 Permit Program		PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub>	VOC, CO, Pb, HAPs

\* Refers to potential emissions that are less than those specified as major by 40 CFR § 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

## 2. Regulatory and/or Statutory Basis

Summary of Regulatory and/or Statutory Basis of Emission or Operational Limits

### Regulatory Overview of Facility

EU, GRP, or SV #	Applicable Regulations	Comments:
GP 001	Minn. R. 7011.0510, subp. 1 and 2  Title I Condition	Standards of Performance for Existing Indirect Heating Equipment  SO <sub>2</sub> limit from fuel oil combustion to restrict SO <sub>2</sub> to less than the major source levels in § 52.21
GP 002	Minn. R. 7007.0800, subp. 2	Propane usage limit to restrict NO <sub>x</sub> to less than the part 70 major source level
EU 004 EU 005 EU 006 EU 011	Title I Conditions  Minn. R. 7011.0610	To restrict PM and PM <sub>10</sub> to less than the § 52.21 major source level (note - cyclones capture product, so PTE is calculated after cyclones; however, venturi scrubbers are control equipment)  Standards of Performance for Direct Heating Equipment
EU 009 EU 013	Minn. R. 7011.0700  Title I Conditions	Standards of Performance for Industrial Process Equipment  To restrict PM and PM <sub>10</sub> to less than the § 52.21 major source level

## 3. Technical Information



Permitting History: This facility was issued a Registration permit in February 1995. In February 1996 the Permittee submitted a permit application to install a second cheese dryer and amend the registration permit. The Permittee was informed by the agency that the option D permit could not be amended, and the facility would no longer be eligible for the option D permit after the proposed modification was made (due to the additional emissions from the proposed dryer). As a result, the Permittee was issued an Installation/Operation permit in March 1997 authorizing construction and operation of the second cheese dryer. The 1996 application along with revised and additional information from the Permittee, was used in the preparation of this total facility State operating permit.

Emission Calculations and Emission Limits:

EU 004 and EU 005 PM and PM<sub>10</sub> Emission Limits: Limits were set at 1.5 times the average PM emission rate measured during 1992 stack testing of the whey dryer (EU 004) and the re-dryer (EU 005). For EU 004, the average emission rate measured during a 1992 stack test for particulate matter (PM) was 0.696 lb/hr, therefore the limit is 1.04 lb/hr for PM and particulate matter less than 10 microns (PM<sub>10</sub>), using the conservative assumption that all PM is PM<sub>10</sub>. The permittee proposed a limit of 0.874 lb/hr which is equivalent to the highest 1-hr test run, but a higher limit is reasonable to avoid noncompliance, considering the Permittee has the incentive to capture PM/PM<sub>10</sub> because the material is product. For EU 005, the average emission rate measured during a 1992 stack test for PM was 0.874 lb/hr, therefore the limit is 1.31 lb/hr for PM and PM<sub>10</sub>.

EU 006 and EU 011 PM and PM<sub>10</sub> Emission Limits: These limits (7.5 lb/hr for each dryer for PM and PM<sub>10</sub>) were carried over from previous permits. 1992 testing of EU 006 measured a PM emission rate of 7.11 lb/hr. Assuming a 90% control efficiency for the venturi scrubber, the uncontrolled emission rate was 71.1 lb PM/hr based on the following:

2683 lb/hr dry cheese production rate  
 Average PM = 7.11 lb/hr  
 Controlled PM factor is 0.00265 lb PM/lb dried product  
 Uncontrolled PM factor is 0.0265 lb PM/lb dried product  
 $2683 \text{ lb/hr} \times 0.0265 \text{ lb PM/lb dried product} = 71.1 \text{ lb PM/hr uncontrolled}$

1999 testing of EU 011 measured emission rates of 4.31 lb/hr for PM and 4.59 lb/hr for PM<sub>10</sub> at a 3200 lb/hr dry cheese process rate. Assuming a 90% control efficiency for the venturi scrubber, the uncontrolled emission rates were 43.1 lb PM/hr and 45.9 lb PM<sub>10</sub>/hr based on the following:

3200 lb/hr dry cheese production rate  
 PM = 4.31 lb/hr; PM<sub>10</sub> = 4.59 lb/hr  
 Controlled PM emission factor is 1.35 E-03 lb PM/lb dry product  
 Uncontrolled PM factor is  $1.35 \text{ E-03} / (1.0 - 0.90) = 0.0135 \text{ lb PM/ton dry product}$   
 Uncontrolled PM emissions are  $3200 \text{ lb/hr} \times 0.0135 \text{ lb PM/ton} = 43.1 \text{ lb/hr}$

Controlled PM<sub>10</sub> emission factor is 1.43 E-03 lb PM<sub>10</sub>/lb dry product  
Uncontrolled PM<sub>10</sub> emission factor is 0.0145 lb PM<sub>10</sub>/ton dry product  
Uncontrolled PM<sub>10</sub> emissions are 45.9 lb/hr

EU 009 Whey Bagging/Loadout (5000 lb/hr) and EU 013 Dry Blending (2500 lb/hr): No emission factors are available, so an emission factor from a somewhat similar process - wheat milling AP-42 table 9.9.1-2 (70 lb PM/ton uncontrolled) was used to calculate potential emissions. Also, it was assumed that all PM is PM<sub>10</sub>. At 99% control efficiency (baghouse controls each process), controlled PM/PM<sub>10</sub> emissions are 1.75 lb/hr from EU 009 and 0.88 lb/hr from EU 013.

EU 010 and EU 012 (cheese dryer 1 and cheese dryer 2) Bagging Emissions: These bagging operations were formerly controlled by a baghouse for each bagging operation. However, the Permittee removed both baghouses because according to the Permittee, the bags in the baghouses never contained any collected particulate matter so it was determined that no control equipment was necessary. Currently, any PM/PM<sub>10</sub> emissions from bagging vent indoors into the work area.

Dryer Emissions Allowed by Minn. Rules: All applicable dryer PM limits are less than the allowable PM emission rate in Minn. R. 7011.0735.

Environmental Review: This permitting action does not trigger any environmental review requirements.

New Source Performance Standards (NSPS): There are no affected facilities as defined in 40 CFR § 60.2 at this facility. Therefore, no NSPS apply.

New Source Review (NSR): This source is subject to a GP 001 90 tpy SO<sub>2</sub> limit for fuel oil combustion to restrict emissions to less than the 250 tpy major source level under New Source Review. The equation for determining compliance is from the previous permit, and for simplicity (assumes distillate and residual oil sulfur content is always at the permitted limit of 0.5% and 1.6%, respectively), remains unchanged in the draft permit. PM and PM<sub>10</sub> emissions from each dryer are controlled by a venturi scrubber (after the product collecting cyclones). Without these scrubbers, the facility would be a major source under NSR. Therefore, the source is a synthetic minor for SO<sub>2</sub>, PM, and PM<sub>10</sub>.

Part 70: Potential emissions are restricted to less than 100 tpy for all criteria pollutants, mostly by various title I limits to avoid NSR. Unrestricted total facility NO<sub>x</sub> emissions are 187.3 tpy, therefore, the facility is a natural minor NO<sub>x</sub> source under NSR. To restrict NO<sub>x</sub> emissions to less than the part 70 major source level, a propane usage limit for GP 002 has been added to the permit.

Title V Monitoring: The standard control equipment requirements to ensure compliance with applicable limits are included in the permit. Note that the cyclones used to collect dried product

on each dryer are not control equipment unlike the venturi scrubber for each dryer. In addition, performance testing for the dryers is required for compliance determination and updating of monitoring parameter values.

Minn. Rules: This facility is subject to the indirect heating equipment rule (7011.0500 - 7011.0550), direct heating equipment rule (7011.0600 - 7011.0620), and the industrial process equipment rule (7011.0700 - 7011.0735).

CAM: The facility is not a major part 70 source and therefore is not subject to the requirements of 40 CFR pt. 64.

Comments Received During Public Notice: None

#### **4. Conclusion**

Based on the information provided by the Land O'Lakes, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04900029-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Marshall Cole, Toni Volkmeier (peer review), Greg Berger

Attachment: Emission Calculations