

**AIR EMISSION PERMIT NO. 10900010- 002
IS ISSUED TO**

Associated Milk Producers Inc

Associated Milk Producers Inc - Rochester
700 First Avenue Southeast
Rochester, Olmsted County, MN 55904

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
Total Facility Operating Permit – Part 70	May 21, 2001

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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal Part 70/Synthetic Minor PSD/NSR

Issue Date:

Expiration:

All Title I Conditions do not expire.

Rodney E. Massey, P.E.
Division Director
Regional Environmental Management
Division

Karen A. Studders
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 produces cheese and lactose powder. Emission sources at the facility are four oil/gas boilers, a lactose dryer, a bag filler, and a diesel generator.

When the existing Permit No. 10900010-001, was issued on May 5, 1997, Rochester was classified as nonattainment for Sulfur Dioxide (SO₂). This draft permit contains the same (Title I SO₂ SIP) conditions present in Permit No. 10900010-001, to limit emissions of SO₂ in order to avoid violation of applicable SO₂ ambient air standards. However, Rochester was redesignated as attainment for SO₂ on May 8, 2001.

No physical changes are allowed by this permit action. This permit action (No. 10900010-002) is for a part 70 major/PSD synthetic minor permit to replace the existing part 70 synthetic minor permit (No. 10900010-001).

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 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
What to do	Why to do it
Air Pollution Control Equipment: Operate all pollution control 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 equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Shutdowns: Notify the Commissioner at least 24 hours in advance of shutdown of any process or control equipment if the shutdown would cause an increase in the emission of air contaminants. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdowns: Notify the Commissioner immediately of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air contaminants. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
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)
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
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)
Discovery of Deviations Endangering Human Health or the Environment Report (written): due two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7007.0800, subp. 6(A)
Application for Permit Amendment: If you need a permit amendment, submit 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
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
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
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises, to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Deviations from requirements cited as "Title I Condition: State Implementation Plan for SO2" shall be reported semiannually with the Semiannual Deviations Report required by this permit. If there were no deviation from any requirement cited as "Title I Condition: State Implementation Plan for SO2", the Permittee shall indicate such in the Semiannual Deviations Report.	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

Record keeping: 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)
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 strip-chart 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)
State Implementation Plan Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of the required monitoring, sample, measurement, or report that corresponds with a "Title I Condition: State Implementation Plan for SO2" requirement.	Title I Condition: State Implementation Plan for SO2
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)
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 federally enforceable.	Minn. R. 7030.0010 - 7030.0080
Amendments to Title I Conditions: If any permit requirement cited as "Title I Condition: State Implementation Plan for SO2" is amended, the amendment must first comply with procedures of parts 7007.0850 (Permit Application Notice and Comment) and 7007.0950 (EPA Review and Objection) applicable to major amendments to Part 70 permits.	Title I Condition: State Implementation Plan for SO2
General Conditions: The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

Subject Item: GP 001 4 gas/oil-fired boilers

Associated Items: EU 001 No 1 North Boiler

EU 002 No 2 North Boiler

EU 003 No 3 Boiler

EU 004 No 4 South Boiler

What to do	Why to do it
Sulfur Dioxide: less than 240 tons/year using 12-month Rolling Sum	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input for each GP 001 emission unit.	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, for each GP 001 emission unit.	Minn. R. 7011.0510, subp. 2
GP 001 Fuel Usage: By the 15th day of each month, the Permittee shall calculate and record for the previous month, total GP 001 fuel oil usage in gallons per month, used oil usage in gallons per month, and natural gas usage in million cubic feet per month.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5
Fuel types limited to natural gas, fuel oil, and on-site generated used oil.	Minn. R. 7007.0800, subp. 2
<p>Initial Determination of Sulfur Content Of Fuel Oil: Prior to combustion of any fuel oil after permit issuance, the Permittee shall sample and analyze the fuel oil in both fuel oil storage tanks (#1 and #2), in order to determine the initial % sulfur by wt. of the oil in each tank. Sampling and analysis shall follow the requirements specified in SV 001 Method 2. The Permittee shall record the initial percent sulfur by weight from the analysis for each tank, as well as the initial volume (gallons) of oil in each tank, and determine the initial prorated sulfur content of the total fuel oil volume as follows:</p> $S_i = [(V_{1i} * S_{1i}) + (V_{2i} * S_{2i})] / V_i$ <p>where:</p> <p>S_i = initial prorated sulfur content of oil in Tanks 1&2 (% by wt.) V_{1i} = initial volume of fuel oil in Tank 1 S_{1i} = initial sulfur content of fuel oil in Tank 1 V_{2i} = initial volume of fuel oil in Tank 2 S_{2i} = initial sulfur content of fuel oil in Tank 2 V_i = initial total volume of oil in Tanks 1&2 ($V_i = V_{1i} + V_{2i}$)</p>	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5
Recordkeeping - Fuel Volume In Storage Tanks Immediately Prior To Fuel Oil Delivery: If the Permittee uses Method 1 specified in SV 001 to determine sulfur content of fuel oil, the Permittee shall measure and record the volume of fuel oil (in gallons) in each of the two fuel oil storage tanks, immediately prior to any fuel oil delivery.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5
<p>Determination Of Sulfur Content Of Fuel Oil: Immediately after any fuel oil delivery, the Permittee shall determine and record the prorated sulfur content of the fuel (% by wt.) in fuel oil storage tanks #1 and #2 by either:</p> <p>1. Calculating the prorated sulfur content based on known sulfur content and fuel volume in the tanks prior to delivery, and % sulfur content and volume of the fuel delivery. The calculation shall be made using the equation below:</p> $S_o = [(V_e * S_e) + (V_d * S_d)] / V_t$ <p>where:</p> <p>S_o = prorated sulfur content after fuel delivery (% by wt) V_e = total volume of fuel oil in tanks #1 and #2 prior to delivery (gallons) S_e = sulfur content of fuel oil in tanks #1 and #2 prior to delivery (% by wt) V_d = volume of delivery (gallons) S_d = sulfur content of delivered fuel (% by wt) determined using Method 1 under SV 001 V_t = total fuel volume in tanks #1 and #2 after delivery, $V_t = V_e + V_d$ (gallons) OR</p>	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

<p>(continued)</p> <p>2. Calculating the prorated sulfur content based on sulfur content determined by Method 2 in SV 001, and fuel volume in the tanks after delivery. The calculation shall be made using the equation below:</p> $So = [(V1 * S1) + (V2 * S2)]/Vt$ <p>where: So = prorated sulfur content after fuel delivery (% by wt) V1 = volume of fuel oil in tank #1 after delivery (gallons) S1 = sulfur content of fuel oil in tank #1 after delivery (% by wt) V2 = volume of fuel oil in tank #2 after delivery (gallons) S2 = sulfur content of fuel oil in tank #2 after delivery (% by wt) Vt = total fuel volume in tanks #1 and #2 after delivery, Vt = V1 + V2 (gallons)</p>	<p>Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5</p>
<p>GP 001 SO2 Emissions Calculations: By the 15th day of each month, calculate and record the SO2 emissions during the previous month (in tons per month) as follows:</p> $[(So * 0.1576 * FO) + (0.27 * UO) + (0.63 * NG)]/2000 = \text{total GP 001 SO2 emissions (tons/month)}$ <p>where: So = % sulfur by wt. in fuel oil, as determined under the "Determination Of Sulfur Content Of Fuel Oil" except 'Si' shall be used as the value of 'So' after the initial sampling/analysis but prior to the first fuel oil delivery after permit issuance FO = fuel oil usage, gallons/month UO = used oil usage, gallons/month NG = natural gas usage, million cubic feet/month</p> <p>By the 15th day of each month, calculate and record the SO2 emissions for the previous 12-month period by summing the monthly SO2 emissions for the previous 12 months. During the first 11 months after permit issuance, the Permittee shall use actual monthly SO2 emissions data for months prior to permit issuance, to calculate the 12-month sum.</p>	<p>Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 4 and 5</p>
<p>Combust used oil in accordance with used oil rules in Minn. R. ch. 7045.</p>	<p>Minn. R. ch. 7045</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

Subject Item: GP 002 Dryer, Bag Filler, and Fabric Filters

- Associated Items:** CE 001 Fabric Filter - Medium Temperature i.e., 180 F<T<250 F
 CE 002 Fabric Filter - Medium Temperature i.e., 180 F<T<250 F
 CE 003 Fabric Filter - Medium Temperature i.e., 180 F<T<250 F
 EU 006 Lactose dryer (CE 001 & CE 002/SV 003 & SV 004)
 EU 008 Bag Filler (CE 003/SV 005)

What to do	Why to do it
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. This applies individually to each emission point in GP 002.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity for each emission point in GP 002.	Minn. R. 7011.0715, subp. 1(B)
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column for each fabric filter (CE 001, CE 002, and CE 003).	Minn. R. 7007.0800, subp. 2
Recordkeeping - Pressure Drop: The permittee shall record the pressure drop (in inches of water column) of each fabric filter once every 24 hours if in operation. If any fabric filter is not in operation, the Permittee shall indicate such in the record.	Minn. R. 7007.0800, subp. 4(D)
For each fabric filter, inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2
For each fabric filter, inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

Subject Item: SV 001

Associated Items: EU 001 No 1 North Boiler

EU 002 No 2 North Boiler

EU 003 No 3 Boiler

EU 004 No 4 South Boiler

What to do	Why to do it
Fuel Usage: less than or equal to 1040 gallons/hour of fuel oil. The permittee shall determine hourly fuel oil usage with a fuel flow meter.	Title I Condition: State Implementation Plan for SO2
Record total fuel oil usage for EU 001, EU 002, EU 003, and EU 004 in any hour during which fuel oil is combusted in EU 001, EU 002, EU 003, or EU 004.	Title I Condition: State Implementation Plan for SO2
<p>Sulfur Content of Fuel: less than or equal to 1.85 percent by weight . The permittee shall demonstrate compliance with the fuel oil sulfur content limit by either method 1 or 2. All fuel oil sulfur content data shall be recorded, and records maintained for at least five years from the date of recording.</p> <p>Method 1. The Permittee shall obtain and maintain a fuel supplier receipt from the fuel supplier for each shipment of fuel oil delivered certifying that the shipment complies with the American Society of Testing and Materials (ASTM) specification for fuel oil (ASTM D 396 or current ASTM specification) and specifying the actual sulfur content in percent by weight. The Permittee shall refuse delivery of any fuel oil with a sulfur content exceeding 1.85 percent by weight.</p> <p>OR (continued on next requirement)</p>	Title I Condition: State Implementation Plan for SO2
<p>Method 2. The Permittee may also analyze the fuel oil in the following manner:</p> <p>a) The Permittee shall sample the fuel oil from the tank(s) after each delivery but not more than once each calendar week when multiple deliveries are made in a calendar week. Sampling shall be conducted within 48 hours after each delivery, or within 48 hours after the last of multiple deliveries in a calendar week. Samples shall be collected from a location representative of the contents of the tank. Record the date and time of delivery, time of fuel sampling, initials of person recording the information, and the results of the fuel analysis.</p> <p>b) The Permittee shall analyze the oil sample to determine sulfur content of the fuel oil in percent by weight, in accordance with ASTM Method D-1552 or the current ASTM method.</p>	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

Subject Item: EU 005 Diesel Generator

Associated Items: SV 002

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Operating Hours: less than or equal to 500 hours/year using 12-month Rolling Sum	Title I Condition: Limit to restrict total facility NOx emissions to less than the major source level under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Recordkeeping - Operating Hours: By the 15th day of each month, the permittee shall calculate and record the EU 005 operating hours for the previous month and the previous 12-month period (12-month rolling sum).	Title I Condition: To restrict total facility NOx emissions to less than the major source level under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
<p>Fuel is restricted to distillate oil with a maximum sulfur content of 0.33 percent by weight. The permittee shall demonstrate compliance with the fuel oil sulfur content limit by either method 1 or 2, and by maintaining all analyses and receipts for a minimum of 5 years:</p> <p>Method 1. The Permittee shall obtain and maintain a fuel supplier receipt from the fuel supplier for each shipment of distillate oil delivered certifying that the shipment complies with the American Society of Testing and Materials (ASTM) specifications for distillate fuel oil and that the sulfur content is less than or equal to 0.33 percent by weight;</p> <p>OR (continued on next requirement)</p>	Title I Condition: State Implementation Plan for SO2; meets requirements of Minn. R. 7011.2300, subp. 2
<p>Method 2. The Permittee may also analyze the distillate fuel oil in the following manner:</p> <p>a) The Permittee shall sample the fuel oil from the tanks(s) after each delivery but not more than once each calendar week when multiple deliveries are made in a calendar week. Sampling shall be conducted within 48 hours after each delivery, or within 48 hours after the last of multiple deliveries in a calendar week. Samples shall be collected from a location representative of the contents of the tank. Record the date and time of delivery, time of fuel sampling, initials of person recording the information, and the results of the fuel analysis.</p> <p>b) The Permittee shall analyze the oil sample to determine the sulfur content of the fuel oil in percent by weight, in accordance with ASTM Method D-1552 or the current ASTM method.</p>	Title I Condition: State Implementation Plan for SO2

TABLE B: SUBMITTALS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste
Permit Number: 10900010 - 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

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 002

What to send	When to send	Portion of Facility Affected
Computer Dispersion Modeling Information	due 1,096 days after Permit Issuance. Submit modeling data for Total Facility NOx emissions, as specified in MPCA guidance for Modeling Information Requests. This modeling information is for data collection purposes, no modeling analysis is required at this time. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility

TABLE B: RECURRENT SUBMITTALS

01/08/02

Facility Name: Associated Milk Producers Inc - Rocheste

Permit Number: 10900010 - 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 report covers January 1 - June 30. The second report covers July 1 - December 31.	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 on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago, Illinois. This report covers all deviations experienced during the calendar year.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
DRAFT AIR EMISSION PERMIT NO. 10900010-002

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:

Applicant/Address	Stationary Source/Address (SIC Code: 2022)
Associated Milk Producers, Inc.	Associated Milk Producers, Inc.
PO Box 455	700 1st Avenue Southeast
315 North Broadway	Rochester, Minnesota 55904
New Ulm, Minnesota 56073	

1.2. Description of the facility

This facility produces cheese and lactose powder. Emission sources at the facility are 4 oil/gas boilers, a lactose dryer, a bag filler, and a diesel generator.

When the existing Permit No. 10900010-001 was issued on May 5, 1997, Rochester was classified as nonattainment for Sulfur Dioxide (SO₂). This draft permit contains the same (Title I SO₂ SIP) conditions present in Permit No. 10900010-001 to limit emissions of SO₂ in order to avoid violation of applicable SO₂ ambient air standards. However, Rochester was redesignated as attainment for SO₂ on May 8, 2001.

1.3 Description of any changes allowed with this permit issuance

No physical changes are allowed by this permit action. This permit action (No. 10900010-002) is for a part 70 major/PSD synthetic minor permit to replace the existing part 70 synthetic minor permit (No. 10900010-001).

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
No permits issued	Not Applicable

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Pb tpy	Total HAP tpy
Total Facility Limited Potential Emissions	84.6	82.1	240.6	205.9	63.6	4.20	0.0	1.14
Total Facility Actual Emissions*	22.6	22.2	0.08	18.6	4.6	0.42	0	NR

*2000 emission inventory; NR = not reported

Table 2. Facility and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)		SO ₂ , NO _x	PM, PM ₁₀ , VOC, CO
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	SO ₂ , NO _x	PM ₁₀ , CO	VOC, Total HAP

* 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.

Permit Action Number: No.10900010-002

Date: 12/12/2003

2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

Regulatory Overview of Facility

EU, GRP, or SV #	Applicable Regulations	Comments:
GP 001	Minn. R. 7007.0510 Title I Conditions to avoid 40 CFR § 52.21	Standards of Performance for Existing Indirect Heating Equipment SO ₂ emission limit to avoid major source status under PSD
GP 002	Minn. R. 7011.0715	Standards of Performance For Post-1969 Industrial Process Equipment
SV 001	Title I SO ₂ SIP Conditions	Nonexpiring fuel usage and sulfur content limits to limit ambient air SO ₂ impact
EU 005	Minn. R. 7011.2300 Title I SO ₂ SIP Conditions	Standards of Performance for Stationary Internal Combustion Engines Nonexpiring sulfur content limit to limit ambient air SO ₂ impact

3. Technical Information

GP 001 NO_x Emission Limit: A GP 001 NO_x limit is not necessary to keep the source a non-major under PSD, because the NO_x emissions are effectively limited by the GP 001 SO₂ emissions limit. As the sulfur content of the residual oil decreases, more residual oil can be combusted without exceeding the 240 tpy SO₂ limit. If sulfur content of residual oil is 0.5%, then 240 tons of SO₂ would be emitted by burning 6,091,370.6 gallons of residual oil (assuming 7.88 lb/gallon of oil), which would emit 167.5 tons of NO_x. In order for the boilers to emit 250 tons per year of NO_x, 9.091 million gallons of residual oil must be combusted, but to avoid exceeding the 240 ton per year SO₂ limit, the residual oil sulfur content would need to be 0.34% (residual oil with this sulfur content is unavailable). Only distillate oil is available with a 0.34% sulfur content. Combusting 8.73 million gallons of distillate oil would produce approximately 87.3 tons of NO_x. Therefore, a GP 001 NO_x limit is not needed to keep the total facility NO_x emissions less than 250 tpy, because the SO₂ limit effectively restricts GP 001 NO_x emissions.

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EU 005 Operating Hours Limit: The operating hours limit was changed from 200 hours per year to 500 hours per year because the application emission calculations are based on 500 hrs/yr. This is the same as EPA allows for PTE calcs for emergency generators, but because this generator is also used as a peak shaver, the limit must be placed in the permit along with appropriate recordkeeping requirements. The limit citation is a Title I Condition to avoid PSD because EU 005 unrestricted potential NOx emissions combined with limited GP 001 NOx emissions would result in total facility NOx greater than 250 tpy. The limited NOx emissions are 11.7 tpy.

Emission Calculations: Application calculations for the boilers (SV 001) and diesel generator (EU 005) were reviewed and corrected as necessary. Emissions data for the whey dryer (EU 006) and the bag filler (EU 008) in the application for the permit were somewhat different than that already in Delta for PER 001. The data in the PER 002 application could not be verified, so the emissions data in Delta was not changed for these emissions sources.

Changes Made To Permit Format But Not To Content: Created GP 002 for fabric filters and moved CE 001, 002 and 003 requirements to GP 002. Moved SV 003, 004 and 005 requirements (IPER) to GP 002. Moved EU requirements from each boiler to GP 001, and revised/updated opacity limit for boilers.

Minn. R. 7007.1300, Insignificant Activities: The Permittee has indicated there are the following IAs at the facility: fuel oil storage tanks with a total capacity less than 100,000 gallons (not required to be listed – subp. 2); a laboratory vent hood (required to be listed – subp. 3); heliarc and wire welding (required to be listed – subp. 3).

Changes Made During Public Notice:

1. The requirement to submit modeling information for total facility NOx emissions was added to the total facility section. This omission was an oversight during the permit drafting process, that was corrected during the public noticing period. This did not require re-noticing the draft permit. Submittal of SO₂ modeling information is not necessary because SO₂ emissions were already modeled prior to issuance of PER 001 (issued May 1997). This was prompted by MPCA Environmental Outcomes air modeling staff.
2. The variable “Sro” from the GP 001 SO₂ emission calculation equation was revised. The variable was changed from ‘Sro’ to ‘So’, because the Permittee does not want to be restricted from combusting distillate fuel oil (permitted fuel types are natural gas, fuel oil, and used oil). (Note: the fuel oil portion of the SO₂ equation is based on the fuel characteristics of residual oil, which is worst case compared to distillate oil. The Permittee requested this in order to simplify the equation and recordkeeping.) The public noticed draft permit specified that Sro was determined as prescribed under SV 001. This meant that the Sro value was based on the supplier certification of maximum fuel sulfur content, or from Permittee’s sampling and analysis. However, the Permittee desired to use the actual sulfur content as stated in their supplier’s certification. Therefore, the following changes were made:

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a. The SV 001 sulfur content limit language was changed to allow the certification to report actual sulfur content of the fuel oil instead of a statement that the sulfur content does not exceed 1.85% by wt. In addition, a sentence was added that prohibited the Permittee from taking delivery of any fuel oil with a sulfur content in excess of 1.85% by wt., in order to meet the original intent of the Title I condition language in the existing permit (PER 001).

b. Two requirements were added to GP 001 for the initial and ongoing determination of sulfur content of fuel oil in the two 16,000 gallon fuel oil storage tanks based on actual sulfur content determined by supplier certification or Permittee's sampling and analysis (as specified under SV 001). According to the Permittee, the two tanks feed a common fuel oil supply line to the four boilers.

These changes were prompted by the permit writer and were necessary because a certification guaranteeing a maximum sulfur content, instead of specifying the actual sulfur content, would unnecessarily restrict the Permittee's use of fuel oil with a lower sulfur content than the 1.85% by wt. limit.

3. Language was added to the GP 001 requirement to calculate the 12-month rolling sum SO₂ emissions stating that for the first 11 months after permit issuance, the Permittee shall use actual monthly SO₂ emissions data for months prior to permit issuance, to calculate the 12-month sum.

No comments were received during the public notice or the EPA 45-day review period.

4. Conclusion

Based on the information provided by the Associated Milk Producers, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 10900010-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

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Attachment: Emission Calculations, GP 001 SO₂ equation derivation