AIR EMISSION PERMIT NO. 09100062- 002

IS ISSUED TO

VeraSun Energy Corp

VERASUN WELCOME LLC
1444 120th Street
Welcome, Martin County, MN 56181

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	Permit Action	Application Date	Issuance Date
Total Facility Operating Permit	PER 001	01/18/2006	
Administrative Amendment	PER 002	07/20/2007	

This permit authorizes the Permittee to 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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: State; Limits to Avoid Pt 70/Limits to Avoid NSR **Administrative Amendment:**
Issue Date: November 29, 2006 **Issue Date:** September 19, 2007
Expiration: Does Not Expire
All Title I Conditions do not expire.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Brad Moore
Commissioner
Minnesota Pollution Control Agency

TABLE OF CONTENTS

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:

VeraSun Welcome, LLC is currently constructing a dry mill fuel ethanol facility located at 1444 120th Street, Welcome, Martin County, Minnesota. The facility is permitted as a minor source (synthetic) with respect to 40 CFR § 52.21 and 40 CFR § 70.2. The facility's maximum production rate of ethanol is limited to 118 million gallons per year (undenatured, before addition of denaturant).

The facility will fire only pipeline quality natural gas in four conventional Dry Distillers Grains and Solubles (DDGS) dryers and two Thermal Oxidizers with Heat Recovery Steam Generators (TO/HRSG). The facility steam will be provided and DDGS Dryer emissions will be controlled by the two TO/HRSG's. The TO/HRSG's will also consume the air used in the DDGS Coolers, combust methane generated at the anaerobic water treatment system, and consume gasses evolved from the distillation process. The facility will use a wet scrubber to clean carbon dioxide produced in the fermentation process before emission to the atmosphere, and have dust collection systems for material handling typical to the industry. The denatured ethanol product will be loaded out to both trucks and rail cars and emissions from the loadout process will be controlled by a flare. The non-process water will be partially evaporated and partially treated and recycled using a brine concentration "zero-discharge" system.

PER 001 TOTAL FACILITY PERMIT

This Total Facility Permit authorized construction and operation of the Facility.

PER 002 ADMINISTRATIVE AMENDMENT

This Administrative Amendment authorizes a 120-day extension of the deadline to submit a Diesel Emissions Idling Plan. This change appears in the Total Facility section of the permit. The address and contact information was also updated in this permit action.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 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
OPERATIONAL LIMITS	hdr
Production: less than or equal to 118 million gallons/year using 12-month Rolling Sum of ethanol (200 proof, prior to addition of denaturant).	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Process Throughput: less than or equal to 3377.5 tons/day (120,625 bushels/day) of grain received, calculated by using the following equation: Grain Received/day (bushels/day) = (# Rail Cars/day) * (3,500bushels/Rail Car) + (# Trucks/day) * (893bushels/Truck) The Permittee is restricted to this total daily grain receiving limit until "Initial PM10 Emission Tests of the Grain Receiving Facility and Subsequent Actions" are approved and fully implemented.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
Initial PM10 Emission Tests of the Grain Receiving Facility and Subsequent Actions: This requirement is optional but, if selected, shall be conducted as follows: The Facility shall conduct initial PM10 emission testing of the grain receiving facility in accordance with a performance test plan approved by the Commissioner. The initial PM10 emission testing shall be conducted before subsequent actions. The Permittee shall keep records of the PM10 emission testing.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
Initial PM10 Emission Tests of the Grain Receiving Facility and Subsequent Actions (continued): If tested PM10 emission rates are greater than those assumed in modeling, the Permittee shall notify the Commissioner within 30 days and shall propose subsequent actions within 60 days of the test, (e.g., add door flaps or totally enclose to obtain better capture/control.) If tested PM10 emission rates are NOT greater than those assumed in the modeling, the Permittee may, if they wish, propose subsequent actions within 60 days of the test, (e.g., MPCA-approved-remodeling with lower emissions/higher capture efficiency to show compliance under increased grain receiving scenario.)	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
FACILITY WIDE LIMITS	hdr
HAPs - Total: less than or equal to 24.0 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period.	Limit to avoid major source classification under 40 CFR Section 63.2
HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period.	Limit to avoid major source classification under 40 CFR Section 63.2
OPERATIONAL REQUIREMENTS	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: 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. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

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
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.	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
MONITORING REQUIREMENTS	hdr
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 and/or B, 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)
RECORDKEEPING	hdr
Recordkeeping: 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)
The Permittee shall record the ethanol production rate hourly. By the 15th day of the month, the Permittee shall calculate the number of gallons of ethanol produced during the previous 12-month period.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
The Permittee shall record the following daily: Number of Grain Rail Cars unloaded. Number of Grain Trucks unloaded. Calculation of grain unloaded using the equation listed in the "Operational Limits" section of Total Facility Requirements.	Minn. R. 7009.0020, Minn. R. 7007.0800, subp. 5
REPORTING/SUBMITTALS	hdr

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

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 on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee must submit a Risk Management Plan (RMP) under 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. An initial RMP must be submitted no later than the latest of the following dates: 1) June 21, 1999; 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or 3) The date on which a regulated substance is first present above a threshold quantity in a process. A full update and resubmission of the RMP is required at least once every five years. The five-year anniversary date is reset whenever your facility fully updates and resubmits their RMP. Submit RMPs to the Risk Management Plan Reporting Center, P.O. Box 1515, Lanham-Seabrook, Maryland 20703-1515. RMP information may be obtained at http://www.epa.gov/swercepp or by calling 1-800-424-9346.	40 CFR pt. 68
MODELING REQUIREMENTS	hdr

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Parameters Used in Modeling: The parameters used in the modeling performed for the Environmental Assessment Worksheet under Minn. R. 4410 and for determining emission and operational limits for this facility are listed in Appendix II of this permit. If the Permittee intends to change the parameters used in the modeling, the Permittee must submit the revised parameters to the Commissioner and receive written approval before making any changes. For stack and vent sources, this includes the source emission rate, location, height, diameters, exit velocity, exit temperature, discharge direction, use of rain caps or rain hats, and, if applicable, any emission rate scalars, and locations and dimensions of nearby buildings. For non-stack/vent sources, this includes the source emission rate, location, size and shape, release height, and if applicable, any emission rate scalars, and the initial lateral dimensions and initial vertical dimensions and adjacent building heights.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
Parameters used in Modeling (continued): The plume dispersion characteristics due to the parameter revisions must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the proposal. If the Permittee chooses to re-model, the modeling must only demonstrate compliance with the applicable regulatory thresholds while maintaining at least one significant impact level for future growth.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
Parameters used in Modeling (continued): For changes that do not involve an increase in an emission rate and that do not require a permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter. For changes involving increases in emission rates that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any paramenter. For changes involving increases in emission rates that require a permit amendment other than a minor amendment, the proposal must be sumbmitted prior to or with the permit amendment application. This is a state only requirement and is not enforceable by the EPA Administrator and cicizens under the Clean Air Act.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
Parameters Used in Modeling (continued): Pollutant Emission Rates: If the Permittee proposes to emit any pollutant in addition to those listed in Appendix II of this permit, or proposes to increase the emission rate of any pollutant listed in Appendix II, the Permittee shall first use the VeraSun Welcome Air Emissions Risk Analysis (AERA) report as a template for recalculating the risk due to the change in emissions. The Permittee shall submit a report to the MPCA of the proposed change and demonstrate that the recalculated risk for all pollutants emitted from the facility does not exceed the acceptable risk criteria used in the Vera Sun Welcome AERA report, Other report could be the Risk Manager Decision Memo (RMDM) if it was decided to exceed criteria in AERA. The Permittee must receive written approval from the MPCA before making any changes.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
The Permittee shall install fencing around the facility. The fencing shall be fully installed prior to the receipt of corn at the facility. In areas where fencing is not permissible by set backs, right-of-ways, safety concerns, or clearances, the Permittee will commit to installation of signage and patrolling to sufficiently restrict public access to the property outlined as fenced in the dispersion modeling.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2
The Permittee shall submit a Diesel Emission Idling Prevention Plan within 300 days after Permit Issuance. The plan must be reviewed and approved by the MPCA but shall be implemented at the time of submittal, as submitted, until revisions are requested by MPCA staff.	Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **GP 002 Limit of DDGS Cooler By-pass of Thermal Oxidizers**

Associated Items: EU 072 Cooling Drum Bypass (AOS)

SV 019 Cooling Drum By-Pass (AOS)

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 1.0 tons/year using 12-month Rolling Sum calculated from actual test data and actual hours of bypass of Thermal Oxidizers (CE 007 and CE 009).	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Volatile Organic Compounds: less than or equal to 5.0 tons/year using 12-month Rolling Sum calculated from actual test data and actual hours of bypass of Thermal Oxidizers (CE 007 and CE 009).	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Bypass emissions are subject to the facility-wide HAP limits set under the Total Facility section of the permit.	Title I Condition: Limit to avoid major source classification under 40 CFR Section 63.2
Hours of operation: DDGS Cooler Bypass of thermal oxidizer hours of operation limited to less than or equal to 4870 hours per year.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
RECORDKEEPING	hdr
The Permittee shall record daily the number of hours the DDGS Cooling Drum Bypass is used. By the 15th day of the month, the Permittee shall calculate the number of hours that the DDGS Cooling Drum Bypass was used during the previous 12-month period.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **GP 003 Material Handling Baghouse Monitoring Requirements**

Associated Items: CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 001 Grain Receiving Baghouse Stack

SV 002 DDGS Baghouse Stack

SV 003 Hammermill Baghouse (CE 003)

What to do	Why to do it
Visible Emissions: The Permittee shall check the fabric filter stack (SV 001, SV 002 and SV 003) 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 for Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5
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 for Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 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
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
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the 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

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **GP 005 Tanks Subject to NSPS Subp. Kb**

Associated Items: TK 001 190 proof EtOH

TK 002 200 proof EtOH

TK 003 Denaturant

TK 004 Denatured EtOH

TK 005 Denatured Et OH

What to do	Why to do it
POLLUTION CONTROL REQUIREMENTS	hdr
Each storage vessel in GP 004 shall be equipped with a fixed roof in combination with an internal floating roof meeting the specifications of 40 CFR Section 60.112 b (a)(1).	40 CFR Section 60.112b(a); Minn. R. 7011.1520(C)
Each internal floating roof shall be equipped with two seals mounted above one another so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	40 CFR Section 60.112 b(a)(1)(ii)(B); Minn. R. 7011.1520(C)
MONITORING REQUIREMENTS	hdr
Visually inspect the internal floating roof, the primary seal, and the secondary seal prior to filling the storage vessel with Volatile Organic Liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, or both, the Permittee shall repair the items before filling the storage vessel.	40 CFR Section 60.113(a)(1); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least once ever twelve (12) months after initial fill as required by this paragraph.	40 CFR Section 60.113(b)(a)(3)(ii); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time each storage vessel is emptied and degassed as required by 40 CFR Section 60.113b(a)(3)(i). Inspections conducted in accordance with this provision occur at least every five (5) years.	40 CFR Section 60.113b(a)(3)(i); Minn. R. 7011.1520(C)
RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: Maintain records showing the dimensions of each tank and an analysis showing each tank's capacity.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Keep a record of each inspection performed as required by 40 CFR Section 60.113b(a)(1), (a)(2), and (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	40 CFR Section 60.115b(a)(2); Minn. R. 7011.1520(C)
REPORTING REQUIREMENTS	hdr
After each inspection required by 40 CFR Section 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR Section 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason why it did not meet the specifictions of 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(3)(ii) and list each repair made.	40 CFR Section 60.115b(a)(4); Minn. R. 7011.1520(C)
Notification: If an inspection is required (under 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(3)(i), notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel, to afford the Administrator the opportunity to have an observer present. If the inspection is not planned and the Permittee could not have known about th einspection 30 days in advance of refilling the storage vessel, Notification shall be made by telephone immediately followed by written documentation demonstrated why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to refilling.	40 CFR Section 60.113b(a)(5); Minn. R. 7011.1520 (C)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **GP 008 DDGS Dryers**

Associated Items: EU 052 DDGS Dryer A

EU 053 DDGS Dryer B

EU 056 DDGS Dryer C

EU 057 DDGS Dryer D

What to do	Why to do it
The Permittee shall vent all gasses to the Thermal Oxidizer/Heat Recovery Steam Generators (CE 007 and CE 009).	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the DDGS Dryers in accordance with the Operation and Maintenance (O & M) Plan.	Minn. R. 7007.0800 supb. 4
Fuel Combusted: Limited to natural gas only.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **GP 009 Thermal Oxidizers**

Associated Items: CE 007 Thermal Oxidizer

CE 009 Thermal Oxidizer

What to do	Why to do it
Volatile Organic Compounds: greater than or equal to 95.0 percent control efficiency . This limit applies individually to each thermal oxidizer.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
Total Particulate Matter: greater than or equal to 90.0 percent control efficiency . This limit applies individually to each thermal oxidizer.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
Temperature: greater than or equal to 1400 degrees F as a three-hour rolling average at the Combustion Chamber unless a new minimum temperature is required set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum temperature is required to be set, it will be based on the average temperature recorded during the most recent MPCA approved performance test where compliance for VOC emissions was demonstrated. If the three-hour rolling average temperature drops below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the average minimum temperature limit is once again achieved. This shall be reported as a deviation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the thermal oxidizer any time that any process equipment controlled by the thermal oxidizer is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings and calculated three hour rolling average temperatures for the combustion chamber.	Title I Condition: Monitoring for Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. The Permittee shall maintain a written record of the daily verifications.	Minn. R. 7007.0800, subp. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Minn. R. 7007.0800, subp. 4
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour rolling average combustion chamber temperature.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, and 14
For periods when the thermal oxidizer is operated above the minimum combustion chamber temperature, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (95%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature 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 & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the thermal oxidizer 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

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 001 Grain Receiving Baghouse Stack**

Associated Items: EU 001 Corn Dump Pit/Auger (a)

EU 002 Corn Elevator #1 (a)

EU 003 Fill Conveyor (a)

EU 004 Corn Silo (a)

EU 005 Emptying Conveyor (a)

EU 006 Corn Enevator #2 (a)

EU 007 Corn Dump Pit/Auger (b)

EU 008 Corn Elevator #1 (b)

EU 009 Fill Conveyor (b)

EU 010 Corn Silo (b)

EU 011 Emptying Conveyor (b)

EU 012 Corn Elevator #2 (b)

EU 013 Hammermill Feed

GP 003 Material Handling Baghouse Monitoring Requirements

What to do	Why to do it
Total Particulate Matter: less than or equal to 1.71 lbs/hour	'Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: less than or equal to 1.71 lbs/hour	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Opacity: less than or equal to 10.0 percent opacity	Minn. R. 7011.1005, subp. 3(D)
POLLUTION CONTROL REQUIREMENTS (CE 001)	hdr
Total Particulate Matter: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
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 CE 001. See GP 003 for additional CE 001 requirements.	Minn. R. 7007.0800, subp. 2 and 14
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 180 days after Initial Startup to measure PM emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure PM10 emissions.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 002 DDGS Baghouse Stack**

Associated Items: EU 014 DDGS Cooling Drag

EU 015 DDGS Storage Drag

EU 016 DDGS Storage

EU 017 Storage Floor Drag

EU 018 Reclaim Leg

EU 019 DDGS Cross Conveyor

EU 020 Truck/Rail Conveyor

EU 021 Truck Load Spout

GP 003 Material Handling Baghouse Monitoring Requirements

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.34 lbs/hour	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: less than or equal to 0.34 lbs/hour	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Opacity: less than or equal to 10.0 percent opacity	Minn. R. 7011.1005, subp. 3(D)
POLLUTION CONTROL REQUIREMENTS (CE 002)	hdr
Total Particulate Matter: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
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 CE 002. See GP 003 for additional CE 002 requirements.	Minn. R. 7007.0800, subp. 2 and 14
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 180 days after Initial Startup to measure PM emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure PM10 emissions.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 003 Hammermill Baghouse (CE 003)**

Associated Items: EU 022 Hammermill #1

EU 023 Hammermill #2

EU 024 Hammermill #3

EU 025 Hammermill #4

GP 003 Material Handling Baghouse Monitoring Requirements

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.82 lbs/hour	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: less than or equal to 0.82 lbs/hour	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Opacity: less than or equal to 10.0 percent opacity	Minn. R. 7011.1005, subp. 3(D)
POLLUTION CONTROL REQUIREMENTS (CE 003)	hdr
Total Particulate Matter: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Particulate Matter < 10 micron: greater than or equal to 99.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
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 CE 003. See GP 003 for additional CE 003 requirements.	Minn. R. 7007.0800, subp. 2 and 14
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 180 days after Initial Startup to measure PM emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure PM10 emissions.	Minn. R. 7017.2020, subp. 1

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 004 CO2 Scrubber (CE 004)**

Associated Items: EU 026 Fermentation Tank #1

EU 027 Fermentation Tank #2

EU 028 Fermentation Tank #3

EU 029 Fermentation Tank #4

EU 030 Fermentation Tank #5

EU 031 Fermentation Tank #6

EU 032 Fermentation Tank #7

EU 033 Beer Well

What to do	Why to do it
EMISSION LIMITS	hdr
Volatile Organic Compounds: less than or equal to 8.87 lbs/hour using 3-hour Rolling Average	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
OPERATIONAL REQUIREMENTS	hdr
Vent all emissions from all fermentation units and beer wells to the Wet Scrubber (CE 004).	Minn. R. 4410
POLLUTION CONTROL REQUIREMENTS (CE 004)	hdr
Volatile Organic Compounds: greater than or equal to 97.0 percent control efficiency	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Water flow rate: greater than or equal to 110.0 gallons/minute for CE 004, unless a new range is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new range is required to be set, it will be based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the water flow rate once every 24 hours when in operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 6.0 inches of water column , unless a new range is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new range is required to be set, it will be based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the wet scrubber at all times that any emission unit controlled by the wet scrubber is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the wet scrubber 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, 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 wet scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for each wet scrubber.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored wet scrubber is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the wet 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

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

TESTING REQUIREMENTS	hdr
Performance Test: due 180 days after Initial Startup to measure VOC emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure HAP emissions.	Minn. R. 7017.2020, subp. 1

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 005 TO/HRSG Stack**

Associated Items: EU 034 Mixer

EU 035 Slurry Tank #1

EU 036 Slurry Tank #2

EU 037 Flash Tank

EU 038 Cook Tubes

EU 039 Liquefaction Tank #1

EU 040 Liquefaction Tank #2

EU 041 Liquefaction Tank #3

EU 042 Liquefaction Tank #4

EU 043 Yeast Tank #1

EU 044 Yeast Tank #2

EU 045 Beer Column

EU 046 Side Stripper

EU 047 Rectifier Column

EU 048 190 Proof Condenser

EU 049 Molecular Sieve

EU 050 200 Proof Condenser

EU 051 Anaerobic Digester (Methanator)

EU 052 DDGS Dryer A

EU 053 DDGS Dryer B

EU 054 Cooling Drum #1

EU 055 TO/HRSG #1

EU 056 DDGS Dryer C

EU 057 DDGS Dryer D

EU 058 Cooling Drum #2

EU 059 TO/HRSG #2

MR 001 NOx CEMS for TO/HRSG's

MR 002 CO CEMS for TO/HRSG's

MR 003 O2 or CO2 CEMS

What to do	Why to do it
PERMITTED FUELS AND CAPACITIES	hdr
Fuel Use: Limited to natural gas only by design.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 9.31 lbs/hour using 3-hour Average . This limit is more stringent than that required under Minn. R. 7011.0610	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Sulfur Dioxide: less than or equal to 8.34 lbs/hour using 3-hour Average	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Nitrogen Oxides: less than or equal to 21.23 lbs/hour using 30-day Rolling Average	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Volatile Organic Compounds: less than or equal to 6.06 lbs/hour using 3-hour Average	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Carbon Monoxide: less than or equal to 21.10 lbs/hour using 30-day Rolling Average	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Opacity: less than or equal to 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 60 percent opacity. The limit applies at all times, except periods of startup, shutdown, or malfunction.	Minn. R. 7011.0610, subp. 1(A)(2)
TESTING REQUIREMENTS	hdr
Performance Test: due 180 days after Initial Startup to measure PM emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure PM10 emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure VOC emissions	Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Initial Startup to measure HAP emissions.	Minn. R. 7017.2020, subp. 1
RECORDKEEPING AND REPORTING	hdr
Recordkeeping: Record and maintain records of the type of fuel and amounts of fuel combusted on a monthly basis. These records may consist of purchase records or receipts.	40 CFR Section 60.13(i) and February 20, 1992 EPA memorandum to meet the rquirements of 40 CFR Section 60.48c(g) and (i)
The Permittee shall submit to the Administrator the performance test data from the initial perforance test and the performance evaluation of the CEMS. The Permittee shall submit to the Administrator the maximum heat input capacity of the affected facility.	40 CFR 60 Section 49b(b)
The Permittee shall maintain records of the following information for each steam generating unit operating day: (1) Calendar date. (2) The average hourly nitrogen oxides emission rates (expressed as NO2) (ng/J or lb/MMBtu heat input) measured or predicted. (3) The 30 day average nitrogen oxides emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days. (4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions limit, with the reasons for such excess emissions as well as a description of corrective actions taken.	40 CFR 60 Section 49b(g)
(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken. (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding the data. (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (8) Identification of the items when the pollutant concentration exceeded full span of the continuous monitoring system. (9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3. (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.	40 CFR 60 Section 49b(g) continued
The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calcualte the annual capacity factor individually for each fuel for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.	40 CFR 60 Section 49b(d)
Maintain records of the fuel combusted each day and calculate annual capacity factors for each fuel.	40 CFR Section 60.49b(d)
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7017.1130; 40 CFR Section 60.7(f)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 006 Product Loadout Flare**

Associated Items: EU 060 Ethanol Truck Loadout

EU 061 Rail Ethanol Loadout

EU 062 EtOH Loading Rack Flare

What to do	Why to do it
The Permittee shall vent all emissions when loading ethanol to trucks or rail cars, to the flare.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
Recordkeeping: The Permittee shall maintain a monthly record of the number of gallons of denatured ethanol loaded.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
EMISSION LIMITS	ndr
Flares must be designed for and operated with no visible emissions except for a period not to exceed a total of 5 minutes duruing any 2 consecutive hours.	40 CFR Section 60.18(c)(1)
OPERATING REQUIREMENTS	hdr
Operating Requirement: Flares shall be operated with a flame present at all times.	40 CFR Section 60.18(c)(2)
Operation Requirement: Flame presence shall be monitored using a thermocopule or any other equivalent device.	40 CFR Section 60.18(f)(2)
Operating Requirement: Flares shall be used only with the net heating value of the gas being combusted geing 200 BTU/scf or greater if the flare is nonassisted.	40 CFR Section 60.18(c)(3)
Operation Requirement: Flares shall be operated at all times when emissions may be vented to them.	40 CFR Section 60.18(e)
Records Requirement: Keep a record of any startup, shutdown, or malfunction in the affected facility or a malfunction of the air pollution control equipment.	NSPS Subp. A; 40 CFR Section 60.7(b)
Summary Report: Submit a report quarterly, postmarked by the 30th day following the end of each calendar quarter. Summary report content and format is defined in 40 CFR Section 60.7(d).	40 CFR Section 60.7(c)
Summary report submittal frequency may be reduced according to compliance status and notification procedures defined in 40 CFR Section 60.7(e).	40 CFR Section 60.7(e)
Recordkeeping: Maintain a file of all measurements, CMS performance evaluations, calibration checks, adjustments and maintenance, and all othe rinformation required by this part in permanent form, suitable for inspection for at least two years following the date of such measurements, maintenance, and records.	40 CFR Section 60.7(f)
Compliance Requirement: For opacity standards, use Reference Method 9 to determine initial compliance, the minimum total time of observations shall be 3 hours (30-6 minute averages) for the performance test or other set of observations (meaning those fugitive type emission sources subject only to an opacity standard).	40 CFR Section 60.11(b)
Operation Requirement: At all times, including periods of startup, shutdown and malfunction, owners shall maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.	40 CFR Section 60.11(d)
Performance and Opacity test results should be sent to the Commissioner.	40 CFR Section 60.11(e)(2)
Steam assisted flares shall be designed and operated with an exit velocity of less than 60 ft/sec, unless it meets one of the following exemptions: 1) Steam assisted flares designed and operated with an exit velocity equal to or greater than 60 ft/sec but less than 200 ft/sec are allowed if the heating value of the combustion gas is greater than 1000 BTU/scf. 2) Steam assisted flares designed and operated with an exit velocity less than Vmax (as determined by the method specified in 40 CFR Section 60.18(f)(5)) and less than 400 ft/sec are allowed.	40 CFR Section 60.18(c)(4)(i-iii)
Flares used to comply with this section shall be steam assisted, air assisted, or nonassisted.	40 CFR Section 60.18(c)(6)
Flares shall be monitored to ensure that they are operated and maintained in conformance with their design.	40 CFR Section 60.18(d)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Compliance Requirement: Reference Method 22 shall be used to determine the compliance with flares with the visible emissions provisions of this subpart.	40 CFR Section 60.18(f)(1)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **SV 011 Fire Pump Stack (test only)**

Associated Items: EU 067 Fire Pump (test only)

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300 subp. 2
EU 067 is for Emergency Use Only (in case of fire) and shall be operated less than 500 hours per year.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2
The Permittee shall keep records of the number of hours the fire pump is operated each day. By the 15th day of the month, the Permittee shall calculate the number of hours the fire pump was used during the previous 12-month period.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 and 40 CFR Section 70.2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **FS 004 Truck Traffic**

Associated Items: CE 017 Paved Roads

What to do	Why to do it
Fugitive Emissions: Do not cause or permit the transporting of any material in a manner which may allow avoidable amounts of particulate matter to become airbourne. Do not cause or permit a road or a driveway to be constructed, used, repaired, or demolished without applying all such reasonable measures, as may be required to prevent particulate matter from becoming airbourne.	Minn. R. 7011.0150
Truck Traffic - Daily Limits: Truck Traffic: less than or equal to 3 trucks/day for grain receiving via straight trucks or tractors with haul wagons Truck Traffic: less than or equal to 224 trucks or tractors per day total for grain receiving (hopper + straight trucks/wagons), DDGS/wetcake loadout, ethanol loadout and denaturant delivery. (Excludes vendor/employee/miscellaneous vehicles.)	Minn. R. 7009
Recordkeeping: The Permittee shall record the total number of trucks or tractors entering the facility each calendar day and keep these records on-site. Total trucks includes grain receiving (hopper + straight trucks/wagons), DDGS/wetcake loadout, ethanol loadout and denaturant delivery.	Minn. R. 7009
Haul Roads- All roads will be paved. Speed Limit Signage: 5 MPH plantwide. The Permittee shall prevent track-out of dirt onto the facility roadways. The Permittee shall use only salt and not sand for wintertime ice abatement. The Permittee shall sweep and vacuum all haul roadways daily, (unless roads are wet or snow-covered,) until "Initial Silt Loading Tests of Paved Roads and Subsequent Actions" are approved and fully implemented.	Minn. R. 7009
Initial Silt Loading Tests of Paved Haul Roads and Subsequent Actions: This requirement is optional but, if selected, shall be conducted as follows: The facility shall conduct onsite silt loading testing from paved roads in accordance with a performance test plan approved by the Commissioner. The initial silt loading testing shall be conducted before subsequent actions. Silt loading tests shall be conducted in accordance with EPA guidance in Appendix C.1 and Appendix C.2 of AP42. The Permittee shall keep records of silt loading testing. If the tested silt loading values are NOT greater than those assumed in the modeling, the Permittee may, (if they wish,) propose Subsequent Actions within 60 days, (e.g., MPCA-approved remodeling to show compliance under scenarios with higher levels of truck traffic, less frequent sweeping/cleaning, etc.)	Minn. R. 7009
Initial Silt Loading Tests of Paved Haul Roads and Subsequent Actions (continued): If the tested silt loading values are found to be greater than those assumed in the modeling the Permittee shall notify the Commissioner within 30 days of the test and propose subsequent actions within 60 days of the test, (e.g., better controls or better quantification methods, such as exposure profiling, mass balances, studies, etc., to be approved by MPCA. See Appendix III for examples.)	Minn. R. 7009.0020

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **FS 005 Equipment Leaks**

Associated Items: CE 018 Leak detection

What to do	Why to do it
STANDARDS: PUMPS	hdr
Pumps in light liquid service: (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR Section 60.485(b), except as provided in 40 CFR Section 60.482-1(c) and paragraphs (d), (e), and (f). (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the seal. (b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (2) If there are no indication of liquids dripping from the pump seal, a leak is detected. (c)(1) When a leak is detected, it shall be reparied as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR Section 60.482-9 (Delay of Repair). (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	40 CFR Section 60.482-2(b) and (c); Minn. R. 7011.2900
STANDARDS: COMPRESSORS	hdr
(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR Section 60.482-1(c) and 40 CFR Section 60.482-3(h) and (i). (b) Each compressor seal system shall be: (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or (2) Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies ith the requriements of 40 CFR Section 60.482-10; or (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. (c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. (d) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.	40 CFR Section 60.482-3(a)-(d); Minn. R. 7011.2900
(e)(1) Each sensor shall be checked daily or shall be equipped with an audible alarm. (2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected. (g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in 40 CFR Section 60.482-9 (Delay of Repair). (2) A first attempt at repair shall be made no later than calendar days after it is detected, except as provided in 40 CFR Section 60.482-9.	40 CFR Section 60.482-3(e); Minn. R. 7011.2900
STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE	hdr
(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background as determined by the methods specified in 40 CFR Section 60.485(c). (b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissionas, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR Section 60.482-9 (Delay of Repair).	40 CFR Section 60.482-4(a) and (b); Minn. R. 7011.2900
STANDARDS: SAMPLING CONNECTION SYSTEMS	hdr
(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR Section 60.482-1(c). (b)Each closed-purge, closed-loop or closed-vent system shall: (1) Return the purged process fluid directly to the process line; or (2) Collect and recycle the purged process fluid to a process; or (3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR Section 60.482-1((c) In situ sampling systems are exempt from these requirements.	40 CFR Section 60.482-5(a)-(c); Minn. R. 7011.2900

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

STANDARDS: OPEN ENDED VALVES OR LINES	hdr
(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR Section 60.482-1(c). (2) The cap, bind flange, plug or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open ended valve or line. (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.	40 CFR Section 60.482-6(a)-(c); Minn. R. 7011.2900
STANDARDS: VALVES	hdr
(a) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR Section 60.485(b). (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. (d)(1) When a leak is detected, it shall be reapired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR Section 60.482-9. (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	40 CFR Section 60.482-7(a)-(d); Minn. R. 7011.2900
(e) First attempts at repair include, but are not limited to, the following best practices where practicable: (1) Tightening of bonnet bolts; (2) Replacement of bonnet bolts; (3) Tightening of packing gland nuts; (4) Injection of lubricant into lubricated packing.	40 CFR Section 60.482-7(e); Minn. R. 7011.2900
STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND FLANGES AND OTHER CONNECTORS	hdr
(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR Section 60.485(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (c)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR Section 60.482-9 (Delay of Repair). (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (d) First attempt at repair include, but are not limited to, the best practices described under 40 CFR Section 60.482-7(e).	40 CFR Section 60.482-8(a); Minn. R. 7011.2900
DELAY OF REPAIR	hdr
(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shoutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. (c) Delay of repair for valves will be allowed if: (1) The owner or operator demonstrates that emissions of purged material resulting from the immediate repair are greater than the fugitive emissions likely to result from delayed repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR Section 60.482-10.	40 CFR Section 60.482-9(a) - (b); Minn. R. 7011.2900

(d) Delay of repair for pumps will be allowed if: (1) Repair required the use of dual mechanical seal system that includes a barrier fluid system, and (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs less than 6 months after the first process unit shutdown.	40 CFR Section 60.482-9(d) and (e); Minn. R. 7011.2900
TESTING PROCEDURES	hdr
Compliance shall be determined by the methods specified in 40 CFR Section 60.485.	40 CFR Section 60.486(b); Minn. R. 7011.2900
RECORDKEEPING	hdr
(b) When each leak is detected, the following requirements apply: (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR Section 60.482-7(c) and no leak has been detected during those 2 months. (3) The identification on equipment except on a valve may be removed after it has been repaired.	40 CFR Section 60.486(b); Minn. R. 7011.2900
(c) When each leak is detected the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: (1) The instrument and operator identification numbers and the equipment identification number. (2) The date the leak was detected and the dates of each attempt to repair the leak. (3) Repair methods applied in each attempt to repair the leak. (4) Above 10,000 is the maximum instrument reading measured by the methods specified in 40 CFR Section 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm. (5) Repair delayed and the reason for the delay, if a leak is not repaired within 15 calendar days after discovery of the leak. (6) The signature of the owner or operator whose decision it was that the repair could not be effected without a process shutdown. (7) The expected date of successful repair of the leak, if a leak is not repaired within 15 days.	40 CFR Section 60.486(c); Minn. R. 7011.2900
continued: (8) Dates of process unit shutdown that occur while the equipment is unrepaired. (9) The date of successful repair of the leak.	40 CFR Section 60.486(c); Minn. R. 7011.2900
REPORTING REQUIREMENTS	hdr
(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date. (b) The initial semiannual report to the Administrator shall include the following information: (1) Process unit identification, (2) Number of valves subject to the requirements of 40 CFR Section 60.482-7 (3) Number of pumps subject to the requirements of 40 CFR Section 60.482-2 (4) Number of compressors subject to the requirements of 40 CFR Section 60.482-3.	40 CFR Section 60.487(a); Minn. R. 7011.2900
(c) All semiannual reports to the administrator shall include the following information summarized from the information in 40 CFR Section 60.486; (1) Process unit identification (2) For each month during the semiannual reporting period, (i) Number of valves for which leaks were detected as described in 40 CFR Section 60.482(7)(b) or 40 CFR Section 60.483-2 (ii) Number of valves for which leaks were not repaired as required in 40 CFR Section 60.482-7(d)(1) (iii) Number of pumps for which leaks were detected as described in 40 CFR Section 60.482-2(b) and (d)(6)(i) (iv) Number of pumps for which leaks were not repaired as required in 40 CFR Section 60.482-2(c)(1) and (d)(6)(ii).	40 CFR Section 60.487(c); Minn. R. 7011.2900

(v) Number of compressors for which leaks were detected as described in 40 CFR Section 60.482-3(f) (vi) Number of compressors for which leaks were not repaired as required in 40 CFR Section 60.482-3(g)(1) (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasibe. (3) Dates of process unit shutdowns which occurred within the semiannual reporting period. (4) Revisions to items reported according ot paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.	40 CFR Section 60.487(c); Minn. R. 7011.2900
(e) Report the results of all performance tests in accordance with 40 CFR Section 60.8. The provisions of 40 CFR Section 60.8(d) do not apply to the affected facilities subject to the provisions of this subpart, except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.	40 CFR Section 60.487(e); Minn. R. 7011.2900

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **FS 006 Wetcake (AOS)**

Associated Items: CE 019 Limited Storage Time

What to do	Why to do it
Wet Cake Storage Limitation: When wet cake by-product is produced, it shall be stored for no longer than 72 hours on-site unless the outside temperature is less than 55 degrees (daily maximum). In all cases, the wet cake shall be removed from the facility property as soon as possible.	Minn. R. 7007.0800, subp. 2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **MR 001 NOx CEMS for TO/HRSG's**

Associated Items: SV 005 TO/HRSG Stack

What to do	Why to do it
CEMS Installation: Install NOx CEMS.	Minn. R. 7017.1006
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 90 days after Initial Startup of the Monitor. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subp.1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report: due 45 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 1, 2, & 4
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEMS Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit (CGA)	Minn. R. 7017.1180, subp. 1
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEMS Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calender quarter in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Emissions Monitoring: The owner or operator shall use a NOx CEMS to measure NOx emissions from SV 005.	Minn. R. 7017.1006
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2
Monitoring Data: Reduce all NOx continuous monitoring systems data to 1-hour averages in accordance with 40 CFR Section 60.13(h). 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period.	40 CFR Section 60.13(h) regarding continuous monitoring systems other than COMS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

The continuous monitoring systems for nitrogen oxides shall be operated and data recorded during all periods of operation except for continuous monitoring system breakdowns and repairs. Data shall be recorded during calibration checks, and during zero and span adjustments. The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor shall be expressed as lb/MMBtu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using at least 2 data points for each 1-hour average. The Procedures under 40 CFR Section 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The span value for measuring nitrogen oxides shall be 1000 ppm and the span value for measruing opacity shall be between 60 and 80 percent.	40 CFR 60 Section 48b(c), (d) and (e)
When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero span adjustments, emission data will be obtained by using standby monitoring systems, or other approved reference methods to provide emission data for a minimum of 70 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 steam generating unit operating days.	40 CFR 60 Section 48b(f)

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **MR 002 CO CEMS for TO/HRSG's**

Associated Items: SV 005 TO/HRSG Stack

What to do	Why to do it
CEMS Installation: Install CO CEMS.	Minn. R. 7017.1006
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 90 days after Initial Startup of the Monitor. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subp.1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report: due 45 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 1, 2, & 4
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEMS Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit (CGA)	Minn. R. 7017.1180, subp. 1
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEMS Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calender quarter in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Emissions Monitoring: The owner or operator shall use a CO CEMS to measure CO emissions from SV 005.	Minn. R. 7017.1006
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

Subject Item: **MR 003 O2 or CO2 CEMS**

Associated Items: SV 005 TO/HRSG Stack

What to do	Why to do it
CEMS Installation: Install O2 or CO2 CEMS.	Minn. R. 7017.1006
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 90 days after Initial Startup of the Monitor. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subp.1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report: due 45 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 1, 2, & 4
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEMS Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit (CGA)	Minn. R. 7017.1180, subp. 1
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEMS Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calender quarter in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE B: SUBMITTALS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

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.

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

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 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 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.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

What to send	When to send	Portion of Facility Affected
Testing Frequency Plan	due 60 days after Initial Performance Test for HAP 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.	SV004, SV005
Testing Frequency Plan	due 60 days after Initial Performance Test for PM 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.	SV001, SV002, SV003, SV005
Testing Frequency Plan	due 60 days after Initial Performance Test for 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.	SV001, SV002, SV003, SV005
Testing Frequency Plan	due 60 days after Initial Performance Test for VOC 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.	SV004, SV005

TABLE B: RECURRENT SUBMITTALS

Facility Name: VeraSun Welcome LLC

Permit Number: 09100062 - 002

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following CEM Certification Test (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	MR001, MR002, MR003
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 occured, 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). To 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 MATERIAL
Facility Name:VeraSun Welcome LLC
Permit Number: 09100062-001

Appendix I: Insignificant Activities

Insignificant Activities and Applicable Requirements

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
3(A)	Fuel use: space heaters fueled by propane may be used in the winter to defrost equipment. *Less than 30,000 MMBTU/hr capacity.*	Minn. R. 7011.0510/0515
3(E)	Storage tanks:	
	1. gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons; *The facility may have gasoline storage tanks for lawn mowers and other small equipment in portable 1-10 gallon fuel cans.*	Minn. R. 7011.0710/0715
3(G)	Emissions from a laboratory, as defined in the subpart. *The facility will have a product testing laboratory.*	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
3(H)	Miscellaneous:	
	3. brazing, soldering or welding equipment; *The facility may perform welding activities associated with facility maintenance.*	Minn. R. 7011.0510/.0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
	4. blueprint copiers and photographic processes; *Normal scale office equipment will be present at the facility office.*	Minn. R. 7011.0105/0110
3(J)	Fugitive Emissions from roads and parking lots. *All main facility haul roads will be paved. There may exist pull-offs, parking spaces, or unpaved areas where a vehicle could drive, but does not do so on a regular basis.*	Minn. R. 7011.0150
3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated	Minn. R. 7011.0710/0715

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
	with primary production processes at the stationary source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment. *Small scale spray painting may occur, but only associated with construction of maintenance activities.*	

Appendix II – Modeling Parameters Used for VeraSun-Welcome (VSW) in Welcome, Martin County, Minnesota

Hardcopy Report Submittal
Synthetic Minor Source Air Pollution Control Permit to Construct Application, VeraSun Welcome, LLC, January 2006 (revised March 2006; resubmittal with final edits August 2006).

Electronic (CD-ROM) Submittal
VeraSun Welcome Electronic Submittal (containing PM10 minor source increment and MN AERA modeling files), prepared by Natural Resource Group, Inc., August 14, 2006.

Appendix II – Full Details
See CD-ROM for full data details.

Appendix II – Summary Report (A Computer-Generated "REPORT" Format with Simple Headers, Simple Sources, and Selected Parameters)
The summary report is for simple (constant) emission rates and corresponding stack/source parameters. It does not fully document details regarding model control options, emission rates with varying emission scalars, corresponding stack/source parameters, wind speed categories for wind erosion, building profile input program (BPIP) outputs, various output selections (e.g., EVENTFIL, MULTYEAR, PLOTFILE, POSTFILE, MAXIFILE), applicable "INCLUDED" file information, receptor grids, or other special features described in the following EPA modeling user guides:

ISCST3: http://www.epa.gov/scram001/userg/regmod/isc3v1.pdf

AERMOD: http://www.epa.gov/scram001/7thconf/aermod/aermodugb.pdf

Note: If any difference exists between summary values in this appendix vs. the hardcopy report vs. the electronic CD-ROM modeled values, the electronic CD-ROM modeled values prevail.

For Your Information
Emission rates in the first four tables are in the units indicated. The first four tables are for PM10, CO, NOX, and SO2, respectively.
Emission rates in the next four tables are not in units indicated but rather equivalent risk emission rate (ERER) units (a.k.a. Q/CHI sums).
Truck traffic PM10 modeling information is attached at the end of this appendix.

**This Run Includes: 246 Source(s); 17 Source Group(s); and 1055 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)						
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)						
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.						
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)						
POINT	SRCIDNT	EASTING	NORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	DIA(M)	DIA(FT)	DEG(K)	DEG(C)	DEG(F)	VS(M/S)	VS(F/M)	ACFM
POINT	VSSV001	371943	4835907	372	0.22	1.71	7.51	45.72	150.00	1.220	4.003	0.	-273.	-460.	19.40	3818.90	48053
POINT	VSSV002	371933	4835911	372	0.04	0.34	1.50	45.72	150.00	0.660	2.165	0.	-273.	-460.	12.54	2468.50	9090
POINT	VSSV003	371941	4835854	372	0.10	0.82	3.60	45.72	150.00	1.020	3.346	0.	-273.	-460.	16.30	3208.66	28222
POINT	VSSV005	372083	4835740	372	1.17	9.31	40.77	38.10	125.00	3.050	10.007	394.	121.	250.	14.23	2801.18	220293
POINT	VSSV006	372348	4835803	372	0.00	0.00	0.02	9.14	29.99	1.520	4.987	700.	427.	800.	8.80	1732.28	33835
POINT	VSSV007	372143	4835712	372	0.02	0.18	0.77	10.36	33.99	6.100	20.013	0.	-273.	-460.	5.00	984.25	309618
POINT	VSSV008	372156	4835712	372	0.02	0.18	0.77	10.36	33.99	6.100	20.013	0.	-273.	-460.	5.00	984.25	309618
POINT	VSSV009	372170	4835711	372	0.02	0.18	0.77	10.36	33.99	6.100	20.013	0.	-273.	-460.	5.00	984.25	309618
POINT	VSSV010	372183	4835711	372	0.02	0.18	0.77	10.36	33.99	6.100	20.013	0.	-273.	-460.	5.00	984.25	309618
POINT	VSSV011	372110	4835691	372	0.00	0.04	0.16	4.57	14.99	0.300	0.984	700.	427.	800.	25.91	5100.39	3881
POINT	VSSV019	372035	4835785	372	0.14	1.14	5.00	14.63	48.00	1.220	4.003	0.	-273.	-460.	6.06	1192.91	15010
VOLUME	VSRA001	372316	4835347	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA002	372316	4835357	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA003	372317	4835367	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA004	372317	4835377	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA005	372318	4835387	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA006	372319	4835397	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA007	372319	4835407	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA008	372320	4835417	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA009	372320	4835427	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA010	372321	4835437	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA011	372321	4835447	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA012	372322	4835457	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA013	372323	4835467	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA014	372323	4835477	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA015	372324	4835487	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA016	372324	4835497	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA017	372319	4835505	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA018	372313	4835514	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA019	372308	4835522	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA020	372300	4835529	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA021	372293	4835536	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA022	372284	4835537	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRA023	372274	4835538	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB024	372264	4835539	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB025	372254	4835540	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB026	372244	4835541	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB027	372234	4835542	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB028	372224	4835542	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB029	372214	4835543	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB030	372204	4835543	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB031	372194	4835544	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB032	372184	4835544	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB033	372174	4835545	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB034	372164	4835545	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB035	372154	4835546	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB036	372144	4835546	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB037	372134	4835547	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB038	372124	4835547	378	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					
VOLUME	VSRB039	372114	4835548	377	0.00	0.01	0.04	2.33	7.64	4.650	2.150	*HROFDY*					

```
VOLUME VSRB040   372104 4835548     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB041   372094 4835549     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB042   372084 4835549     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB043   372074 4835550     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB044   372064 4835550     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB045   372054 4835551     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB046   372044 4835551     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB047   372034 4835552     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB048   372024 4835552     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB049   372014 4835553     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB050   372004 4835553     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB051   371994 4835554     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB052   371984 4835554     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB053   371974 4835555     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB054   371964 4835555     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB055   371954 4835556     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB056   371944 4835556     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB057   371934 4835557     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB058   371924 4835558     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB059   371914 4835558     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB060   371904 4835559     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB061   371894 4835559     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB062   371884 4835560     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRB063   371874 4835560     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC064   371864 4835561     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC065   371854 4835561     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC066   371844 4835562     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC067   371835 4835566     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC068   371827 4835571     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC069   371819 4835577     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC070   371810 4835582     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC071   371805 4835590     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC072   371801 4835600     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC073   371797 4835609     378    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC074   371793 4835618     377    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC075   371789 4835627     377    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC076   371788 4835637     377    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC077   371789 4835647     376    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC078   371789 4835657     376    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRC079   371790 4835667     376    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD080   371790 4835677     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD081   371791 4835687     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD082   371791 4835697     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD083   371792 4835707     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD084   371792 4835717     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD085   371793 4835727     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD086   371793 4835737     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD087   371794 4835747     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD088   371794 4835757     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD089   371795 4835767     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD090   371795 4835777     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD091   371796 4835787     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD092   371796 4835797     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD093   371797 4835807     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD094   371797 4835817     375    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRD095   371798 4835827     374    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE096   371798 4835836     374    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE097   371799 4835846     374    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE098   371799 4835856     373    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE099   371800 4835866     373    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE100   371800 4835876     373    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
```

```
VOLUME VSRE101   371801 4835886     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE102   371801 4835896     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE103   371802 4835906     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE104   371807 4835914     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE105   371814 4835921     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE106   371821 4835928     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE107   371831 4835928     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE108   371841 4835928     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE109   371851 4835928     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE110   371861 4835927     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE111   371871 4835927     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE112   371881 4835926     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE113   371891 4835926     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE114   371901 4835925     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE115   371911 4835925     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE116   371921 4835925     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE117   371931 4835924     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRE118   371941 4835924     372    0.00    0.01    0.06    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF119   371951 4835923     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF120   371961 4835923     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF121   371971 4835922     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF122   371981 4835922     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF123   371991 4835922     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF124   372001 4835921     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF125   372011 4835921     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF126   372021 4835920     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF127   372031 4835920     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF128   372041 4835920     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF129   372051 4835919     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF130   372061 4835919     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF131   372071 4835918     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF132   372081 4835918     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF133   372091 4835917     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF134   372098 4835912     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF135   372101 4835903     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRF136   372105 4835894     372    0.00    0.01    0.03    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG137   372107 4835884     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG138   372106 4835874     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG139   372106 4835864     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG140   372105 4835854     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG141   372105 4835844     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRG142   372103 4835835     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH143   372093 4835833     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH144   372083 4835830     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH145   372074 4835830     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH146   372064 4835830     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH147   372054 4835831     372    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH148   372044 4835831     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH149   372034 4835831     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH150   372024 4835832     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH151   372014 4835832     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH152   372004 4835832     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH153   371994 4835833     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH154   371984 4835833     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH155   371974 4835833     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH156   371964 4835834     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH157   371954 4835834     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH158   371944 4835834     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH159   371934 4835834     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH160   371924 4835835     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH161   371914 4835835     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
```

```
VOLUME VSRH162   371904 4835835     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH163   371894 4835836     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH164   371884 4835836     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH165   371874 4835836     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH166   371864 4835837     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH167   371854 4835837     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH168   371844 4835837     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH169   371834 4835838     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH170   371824 4835838     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRH171   371816 4835838     373    0.00    0.01    0.04    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI172   372107 4835824     372    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI173   372107 4835814     372    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI174   372106 4835804     372    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI175   372106 4835794     372    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI176   372105 4835784     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI177   372105 4835774     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI178   372105 4835764     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI179   372104 4835754     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI180   372104 4835744     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI181   372104 4835734     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI182   372103 4835724     373    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI183   372103 4835714     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI184   372103 4835704     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI185   372102 4835694     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI186   372102 4835684     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI187   372102 4835674     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI188   372100 4835665     374    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI189   372092 4835659     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI190   372082 4835658     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI191   372072 4835658     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI192   372062 4835659     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI193   372052 4835659     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI194   372042 4835659     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI195   372032 4835659     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRI196   372022 4835660     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ197   372012 4835660     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ198   372002 4835660     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ199   371992 4835661     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ200   371982 4835661     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ201   371972 4835661     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ202   371962 4835662     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ203   371952 4835662     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ204   371942 4835662     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ205   371932 4835662     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ206   371922 4835663     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ207   371912 4835663     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ208   371902 4835663     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ209   371892 4835664     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ210   371882 4835664     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ211   371872 4835664     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ212   371862 4835665     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ213   371852 4835665     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ214   371842 4835665     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ215   371832 4835665     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ216   371822 4835666     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ217   371812 4835666     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRJ218   371805 4835666     375    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRK219   371644 4835686     380    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRK220   371654 4835686     380    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRK221   371664 4835686     380    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
VOLUME VSRK222   371674 4835686     380    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
```

```
 VOLUME VSRK223   371684 4835686     380    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK224   371694 4835686     379    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK225   371704 4835686     379    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK226   371714 4835686     379    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK227   371724 4835686     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK228   371727 4835694     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK229   371728 4835704     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK230   371729 4835714     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK231   371731 4835724     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
 VOLUME VSRK232   371731 4835731     378    0.00    0.00    0.00    2.33    7.64   4.650   2.150 *HROFDY*
   AREA VSFS001   371923 4835922     372    0.03    0.22    0.96    1.52    4.99   40.00   26.00 (0.2655E-04 G/S/M2, 0.1040E+04 M2)
   AREA VSFS002   371961 4835945     372    0.00    0.01    0.03    1.52    4.99   40.00   26.00 (0.8575E-06 G/S/M2, 0.1040E+04 M2)
   AREA VSFS003   371967 4835840     372    0.01    0.05    0.23    1.52    4.99   32.00   32.00 (0.6461E-05 G/S/M2, 0.1024E+04 M2)
  TOTAL                                    2.01   15.96   69.88
  SUMP=                                    1.77   14.07   61.64
  SUMV=                                    0.20    1.60    7.02
  SUMA=                                    0.04    0.28    1.22
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                  ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                   ***        19:07:11
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_CO.LST
**This Run Includes:     2 Source(s);      4 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV005   372083 4835740     372    2.66   21.10   92.41   38.10  125.00   3.050  10.007    394.    121.    250.   14.23 2801.18  220293
  POINT VSSV006   372348 4835803     372    0.07    0.56    2.44    9.14   29.99   1.520   4.987    700.    427.    800.    8.80 1732.28   33835
  TOTAL                                    2.73   21.66   94.85
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                  ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                   ***        19:03:14
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_NOX.LST
**This Run Includes:     2 Source(s);      4 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV005   372083 4835740     372    2.68   21.23   92.99   38.10  125.00   3.050  10.007    394.    121.    250.   14.23 2801.18  220293
  POINT VSSV006   372348 4835803     372    0.03    0.24    1.04    9.14   29.99   1.520   4.987    700.    427.    800.    8.80 1732.28   33835
  TOTAL                                    2.71   21.47   94.03
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                    ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                     ***        19:00:46
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_SO2.LST
**This Run Includes:     1 Source(s);      3 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV005   372083 4835740     372    2.32   18.43   80.71   38.10  125.00   3.050  10.007    394.    121.    250.   14.23 2801.18  220293
  TOTAL                               2.32   18.43   80.71
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                    ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                     ***        19:11:07
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_PTEACUTE.LST
**This Run Includes:    14 Source(s);     17 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV004   371887 4835759     372    0.00    0.01    0.04   22.86   75.00   0.690   2.264      0.   -273.   -460.   14.05 2765.75   11132
  POINT VSSV005   372083 4835740     372    0.01    0.10    0.43   38.10  125.00   3.050  10.007    394.    121.    250.   14.23 2801.18  220293
  POINT VSSV006   372348 4835803     372    0.00    0.00    0.00    9.14   29.99   1.520   4.987    700.    427.    800.    8.80 1732.28   33835
  POINT VSSV013   372169 4835853     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.   -273.   -460.    0.01    1.97       1
  POINT VSSV014   372189 4835852     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.   -273.   -460.    0.01    1.97       1
  POINT VSSV015   372211 4835852     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.   -273.   -460.    0.01    1.97       1
  POINT VSSV016   372209 4835880     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.   -273.   -460.    0.01    1.97       1
  POINT VSSV017   372172 4835883     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.   -273.   -460.    0.01    1.97       1
  POINT VSSV019   372035 4835785     372    0.00    0.02    0.08   14.63   48.00   1.220   4.003      0.   -273.   -460.    6.06 1192.91   15010
   AREA VSFS005   372217 4835914     372    0.00    0.00    0.00    1.52    4.99  405.00   80.00 (0.3492E-10 G/S/M2, 0.3240E+05 M2)
   AREA VSFS006   372048 4835799     372    0.00    0.00    0.01    1.52    4.99   36.58   27.43 (0.2424E-06 G/S/M2, 0.1003E+04 M2)
  TOTAL                               0.02    0.13    0.57
  SUMP=                               0.02    0.13    0.56
  SUMA=                               0.00    0.00    0.01
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                 ***        21:11:04
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_PTECANC.LST
**This Run Includes:     9 Source(s);     12 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV004   371887 4835759     372    0.06    0.51    2.23   22.86   75.00   0.690   2.264      0.    -273.    -460.   14.05 2765.75   11132
  POINT VSSV005   372083 4835740     372    0.10    0.82    3.61   38.10  125.00   3.050  10.007    394.     121.     250.   14.23 2801.18  220293
  POINT VSSV006   372348 4835803     372    0.00    0.01    0.02    9.14   29.99   1.520   4.987    700.     427.     800.    8.80 1732.28   33835
  POINT VSSV015   372211 4835852     372    0.00    0.00    0.01   11.58   37.99   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV016   372209 4835880     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV017   372172 4835883     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV019   372035 4835785     372    0.01    0.11    0.49   14.63   48.00   1.220   4.003      0.    -273.    -460.    6.06 1192.91   15010
   AREA VSFS006   372048 4835799     372    0.01    0.06    0.27    1.52    4.99   36.58   27.43 (0.7685E-05 G/S/M2, 0.1003E+04 M2)
  TOTAL                                    0.19    1.52    6.64
  SUMP=                                    0.18    1.45    6.37
  SUMA=                                    0.01    0.06    0.27
```

```
*** AERMOD - VERSION 04300 ***    *** VeraSun Welcome LLC                                                ***        08/15/06
                                  *** PM10 Increment and MN AERA Modeling                                 ***        20:15:32
U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_PTECHRON.LST
**This Run Includes:    26 Source(s);     18 Source Group(s); and    1055 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT VSSV004   371887 4835759     372    0.12    0.96    4.19   22.86   75.00   0.690   2.264      0.    -273.    -460.   14.05 2765.75   11132
  POINT VSSV005   372083 4835740     372    0.51    4.06   17.78   38.10  125.00   3.050  10.007    394.     121.     250.   14.23 2801.18  220293
  POINT VSSV006   372348 4835803     372    0.00    0.00    0.00    9.14   29.99   1.520   4.987    700.     427.     800.    8.80 1732.28   33835
  POINT VSSV013   372169 4835853     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV014   372189 4835852     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV015   372211 4835852     372    0.00    0.00    0.00   11.58   37.99   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV016   372209 4835880     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV017   372172 4835883     372    0.00    0.00    0.00   15.24   50.00   0.300   0.984      0.    -273.    -460.    0.01    1.97       1
  POINT VSSV019   372035 4835785     372    0.18    1.40    6.13   14.63   48.00   1.220   4.003      0.    -273.    -460.    6.06 1192.91   15010
  POINT VSIDLP1   371882 4835563     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP2   371884 4835557     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP3   371974 4835557     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP4   371975 4835551     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP5   372043 4835552     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP6   372047 4835547     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP7   372109 4835550     377    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP8   371927 4835556     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP9   372110 4835544     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP10  371927 4835560     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP11  372174 4835548     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
  POINT VSIDLP12  372176 4835543     378    0.00    0.01    0.03    3.65   11.98   0.100   0.328    533.     260.     500.    5.00  984.25      83
   AREA VSFS005   372217 4835914     372    0.00    0.00    0.00    1.52    4.99  405.00   80.00 (0.4200E-09 G/S/M2, 0.3240E+05 M2)
   AREA VSFS006   372048 4835799     372    0.01    0.08    0.37    1.52    4.99   36.58   27.43 (0.1050E-04 G/S/M2, 0.1003E+04 M2)
  TOTAL                                    0.83    6.57   28.78
  SUMP=                                    0.82    6.49   28.42
  SUMA=                                    0.01    0.08    0.37
```

U:\PROJECTS\DBECKER\PROJECTS\VSWAUG06\MAINRUNS\ALLOTHER_1986\VSWRevisionAug142006FINAL_86_PTESUBCH.LST
**This Run Includes: 10 Source(s); 13 Source Group(s); and 1055 Receptor(s)

AREA	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)							
VOLUME	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)							
AREACIRC	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)							
POINT	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	DIA(M)	DIA(FT)	DEG(K)	DEG(C)	DEG(F)	VS(M/S)	VS(F/M)	ACFM	
POINT	VSSV004	371887 4835759	372	0.01	0.07	0.30	22.86	75.00	0.690	2.264	0.	-273.	-460.	14.05	2765.75	11132	
POINT	VSSV005	372083 4835740	372	0.05	0.36	1.60	38.10	125.00	3.050	10.007	394.	121.	250.	14.23	2801.18	220293	
POINT	VSSV006	372348 4835803	372	0.00	0.00	0.00	9.14	29.99	1.520	4.987	700.	427.	800.	8.80	1732.28	33835	
POINT	VSSV015	372211 4835852	372	0.00	0.00	0.00	11.58	37.99	0.300	0.984	0.	-273.	-460.	0.01	1.97	1	
POINT	VSSV016	372209 4835880	372	0.00	0.00	0.00	15.24	50.00	0.300	0.984	0.	-273.	-460.	0.01	1.97	1	
POINT	VSSV017	372172 4835883	372	0.00	0.00	0.00	15.24	50.00	0.300	0.984	0.	-273.	-460.	0.01	1.97	1	
POINT	VSSV019	372035 4835785	372	0.02	0.13	0.56	14.63	48.00	1.220	4.003	0.	-273.	-460.	6.06	1192.91	15010	
AREA	VSFS006	372048 4835799	372	0.00	0.01	0.03	1.52	4.99	36.58	27.43	(0.7196E-06 G/S/M2, 0.1003E+04 M2)						
TOTAL				0.07	0.57	2.48											
SUMP=				0.07	0.56	2.46											
SUMA=				0.00	0.01	0.03											

VeraSun Welcome, LLC

Truck Traffic PM10 Modeling Calcs

Traffic Calculated by Activity

Road Segments Traveled

Activity	Annual Amount	Amount per Truck	Number of Trucks	A	B	C	D	E	F	G	H	I	J	K
Grain Receiving (tons)	1,232,836	25	49,313	98,627	98,627	98,627	98,627	49,313	49,313	49,313	49,313	0	0	0
DDGS Loadout (tons)	385,261	25	15,410	30,821	30,821	30,821	30,821	15,410	15,410	15,410	15,410	0	0	0
EtOH Loadout (gallons)	124,210,526	8,000	15,526	31,053	31,053	31,053	31,053	15,526	15,526	15,526	15,526	0	0	0
Denaturant Delivery (gallons)	6,210,526	8,000	776	1,553	1,553	1,553	1,553	776	776	776	776	0	0	0
Water Treatment Salt Loadout (tons)	20,000	25	800	1,600	1,600	1,600	800	800	800	800	0	800	800	
Employee Vehicles	50 employees		18,250	0	0	0	0	0	0	0	0	0	0	36,500
Vendor Vehicles and misc trips	50 vehicles per day		18,250	36,500	36,500	36,500	18,250	18,250	18,250	18,250	18,250	18,250	18,250	0
			TOTALS	200,153	200,153	200,153	181,103	100,077	100,077	100,077	99,277	19,050	19,050	36,500
			ADT	548	548	548	496	274	274	274	272	52	52	100
			Peak Single Day Modeled	548	548	548	496	274	274	274	272	52	52	100

Fleet Loaded or Unloaded Status Mapped Out by Activity and by Segment

Percent of Trips Loaded

Activity	Empty Weight (tons)	Full Weight (tons)		A	B	C	D	E	F	G	H	I	J	K
Grain Receiving (tons)	15	40		50%	50%	50%	50%	100%	0%	0%	0%			
DDGS Loadout (tons)	15	40		50%	50%	50%	50%	0%	100%	100%	100%			
EtOH Loadout (gallons)	15	40		50%	50%	50%	50%	0%	0%	100%	100%			

Denaturant Delivery (gallons)	15	40		50%	50%	50%	50%	100%	100%	0%	0%			
Water Treatment Salt Loadout (tons)	15	40		50%	50%	50%	0%	0%	0%	0%		0%	100%	
Employee Vehicles	1.25	1.25												100%
Vendor Vehicles and misc trips	2.5	2.5		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Fleet Average Weight Calculated by Segment				**Fleet Weight**										
Activity	**Empty Weight (tons)**	**Full Weight (tons)**		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
Grain Receiving (tons)	15	40		27.5	27.5	27.5	27.5	40.0	15.0	15.0	15.0			
DDGS Loadout (tons)	15	40		27.5	27.5	27.5	27.5	15.0	40.0	40.0	40.0			
EtOH Loadout (gallons)	15	40		27.5	27.5	27.5	27.5	15.0	15.0	40.0	40.0			
Denaturant Delivery (gallons)	15	40		27.5	27.5	27.5	27.5	40.0	40.0	15.0	15.0			
Water Treatment Salt Loadout (tons)	15	40		27.5	27.5	27.5	15.0	15.0	15.0	15.0		15.0	40.0	
Employee Vehicles	1.25	1.25												1.25
Vendor Vehicles and misc trips	2.5	2.5		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Fleet Average Weight (tons)				**22.94**	**22.94**	**22.94**	**24.93**	**25.23**	**16.76**	**20.45**	**20.49**	**3.02**	**4.07**	**1.25**

Annual PTE														
				A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
Lenth of Segment (1 vol source) (m)				10	10	10	10	10	10	10	10	10	11	10
ADT				548	548	548	496	274	274	274	272	52	52	100
Summer sL (g/m2)				0.20	0.20	0.20	0.20	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Winter sL (g/m2)				0.60	0.60	0.60	0.60	2.40	2.40	2.40	2.40	2.40	2.40	2.40

k = 0.016 lb/VMT x 1VMT/1609.344 m = 9.942E-06 lb/m traveled				9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06
Fleet Weight (tons)				22.94	22.94	22.94	24.93	25.23	16.76	20.45	20.49	3.02	4.07	1.25
Average Speed (mph)				5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Summer Factor (lb/vol source*hr)				**4.39E-03**	**4.39E-03**	**4.39E-03**	**4.50E-03**	**5.17E-03**	**2.80E-03**	**3.77E-03**	**3.75E-03**	**4.09E-05**	**7.03E-05**	**2.08E-05**
Winter Factor (lb/vol source*hr)				**8.97E-03**	**8.97E-03**	**8.97E-03**	**9.19E-03**	**1.27E-02**	**6.90E-03**	**9.29E-03**	**9.25E-03**	**1.01E-04**	**1.73E-04**	**5.12E-05**
Number of Segments	SUM=	232		23	40	16	16	23	18	6	29	25	22	14
Winter Months				3	3	3	3	3	3	3	3	3	3	3
Summer Months				9	9	9	9	9	9	9	9	9	9	9
PM10 PTE (tpy)	SUM=	4.13E+00		5.58E-01	9.70E-01	3.88E-01	3.97E-01	7.11E-01	3.02E-01	1.35E-01	6.51E-01	6.11E-03	9.25E-03	1.74E-03
PMTOT PTE (tpu)	SUM=	2.12E+01		2.86E+00	4.97E+00	1.99E+00	2.04E+00	3.65E+00	1.55E+00	6.94E-01	3.34E+00	3.13E-02	4.74E-02	8.92E-03
PM2.5 PTE (tpy)	SUM=	1.03E+00		1.39E-01	2.42E-01	9.70E-02	9.94E-02	1.78E-01	7.54E-02	3.38E-02	1.63E-01	1.53E-03	2.31E-03	4.35E-04

Peak Daily Emission (modeling basis)

-														
				A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
Lenth of Segment (1 vol source) (m)				10	10	10	10	10	10	10	10	10	11	10
Peak Daily				548	548	548	496	274	274	274	272	52	52	100
sL (g/m2)				0.60	0.60	0.60	0.60	2.40	2.40	2.40	2.40	2.40	2.40	2.40
k = 0.016 lb/VMT x 1VMT/1609.344 m = 9.942E-06 lb/m traveled				9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06	9.942E-06
Fleet Weight (tons)				22.94	22.94	22.94	24.93	25.23	16.76	20.45	20.49	3.02	4.07	1.25
Average Speed (mph)				5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Peak Rate (lb/vol source*hr)				**8.97E-03**	**8.97E-03**	**8.97E-03**	**9.19E-03**	**1.27E-02**	**6.90E-03**	**9.29E-03**	**9.25E-03**	**1.01E-04**	**1.73E-04**	**5.12E-05**

Appendix III: Better Road Dust Quantification

- Midwest Research Institute exposure profiling method with MRI peer review
- Midwest Research Institute exposure profiling method with EPA peer review
- Other possible methods with EPA peer review or EPA-approved contractor peer review
    - Past Examples: previous ADM-Marshall study and ongoing Iron Range study
    - Others: better data, research, tests, mass balance considerations, ambient monitoring, etc.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 09100062-002

This Technical Support Document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 2869)
VeraSun Welcome, LLC 1444 120th Street Welcome, MN 56181	VeraSun Welcome, LLC 1444 120th Street Welcome, Martin County
Contact: **Brad Micheel** Phone: **(605) 696-7516** Fax**: (605) 696-7290**	

1.2. Facility Description

VeraSun Welcome, LLC is currently constructing a dry mill fuel ethanol facility located at 1444 120th Street, Welcome, Martin County, MN. The facility is permitted as a minor source (synthetic) with respect to 40 CFR § 52.21 and 40 CFR § 70.2. The facility's maximum production rate of ethanol is limited to 118 million gallons per year (undenatured, before addition of denaturant). The facility will have a maximum ethanol production capacity of 118 million gallons per year (undenatured, prior to the addition of denaturant). The facility will fire only pipeline-quality natural gas in four conventional Dry Distillers Grains with Solubles (DDGS) Dryers and two Thermal Oxidizers with Heat Recovery Steam Generators (TO/HRSG). Facility steam will be provided and DDGS Dryer emissions will be controlled by the two TO/HRSG's. The TO/HRSG's will also consume the air used in the DDGS Coolers, combust methane generated at the anaerobic water treatment system, and consume gasses evolved from the distillation process. The facility will use a wet scrubber to clean Carbon Dioxide (CO2) produced by the fermentation process before emission to the atmosphere. Dust collection systems will be used for handling materials typical to the industry. The denatured ethanol product will be loaded out to both trucks and rail cars and emissions from the loadout process will be controlled by a flare. The non-process water will be partially evaporated and partially treated and recycled using a brine concentration "zero-discharge" system.

1.3 Description of the Activities Allowed by this Permit Action

This Administrative Amendment authorizes a 120-day extension of the deadline to submit a Diesel Emissions Idling Plan. This change appears in the Total Facility section of the permit. The address and contact information was also updated in this permit action.

2. Conclusion

Based on the information provided by VeraSun Welcome, LLC, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 09100062-002, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jessica L. Forsberg (permit writer/engineer)
Sarah Kilgriff (enforcement)
Dave Beil (peer reviewer)

AQ File No. 4282; DQ 1610