

Facility ID: 0247000750 Issuance type: Draft State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0247000750 Emissions Unit ID: B003 Issuance type: Draft State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Kewanee 25.1 mmBtu/hr. Nat. Gas/No. 2 Fuel Oil-Fired Boiler (B003)	OAC Rule 3745-17-07(A) OAC Rule 3745-17-10(B)(1) OAC Rule 3745-18-04	a. Per OAC Rule 3745-17-10(B)(1), the particulate emissions from this emissions unit shall not exceed 0.020 pounds per million Btu (mmBtu) of heat input. Annual particulate emissions shall not exceed 2.20 tons.  b. Sulfur dioxide (SO2) emissions from this facility shall not exceed 26.54 tons per year. SO2 emissions from this gas/No.2 fuel oil-fired emissions unit (B003) shall not exceed 1.73 pounds per hour (annual average) and 7.58 tons per year. (See "Federally Enforceable Emission Requirements for Sulfur Dioxide" below.)

**2. Additional Terms and Conditions**

- (a) **VISIBLE EMISSION RESTRICTIONS:**  
This emissions unit shall comply with OAC Rule 3745-17-07(A), which limits visible particulate emissions as follows:
  - i. Except as provided below, visible particulate emissions from the stack shall not exceed an opacity of twenty (20) percent as a six-minute average.
  - ii. Visible particulate emissions from the stack may exceed twenty (20) percent as a six-minute average for not more than six (6) consecutive minutes in any sixty- minute period, but shall not exceed sixty (60) percent opacity at any time.  
The visible particulate emission limitations specified above shall not apply to the following operations, provided the operations are documented in a boiler operations log kept at the facility:
    - i. The start-up of the source for a period of time required to achieve stable combustion conditions, but no more than three (3) hours from the moment of start-up. "Start-up" means the commencement of firing of fuel from a cold non- fired condition.
    - ii. The shutdown of the source for a period of not more than three (3) hours.
    - iii. The malfunction of the source or associated equipment, if the owner of the source or operator of the equipment complies with the requirements of OAC Rule 3745- 15-06.
 This boiler operations log shall clearly document the date, beginning time, and ending time of the exempted operations listed above.
- (b) **FEDERALLY ENFORCEABLE EMISSION REQUIREMENTS FOR SULFUR DIOXIDE:**  
The total annual emissions of SO2 from all permitted emissions units at this facility shall be limited to 26.54 tons. Since two (2) other permitted emissions units at this facility (two gas/No. 2 fuel oil-fired boilers, Sources B001 and B002, both with maximum heat input rates of 31.4 mmBtu/hr.) collectively will have federally enforceable allowable SO2 emissions of 18.96 tons per year, the annual allowable emissions from this gas/No. 2 fuel oil-fired boiler (B003) shall not exceed 7.58 tons.  
This annual sulfur dioxide emissions limitation on source B003 shall be achieved by restricting both the quality and volume of fuel oil burned in this emissions unit, as well as the total amount of time that this

boiler may operate using fuel oil during any rolling 12-month period, in the following manner:

i. The fuel oil used in this emissions unit shall be restricted to No. 2 fuel oil with a sulfur dioxide emissions rate of no greater than 0.30 pounds per mmBtu actual heat input. This restriction shall be achieved by limiting the No. 2 fuel oil to the following specifications:

- (a) sulfur content of no greater than 0.30 percent;
- (b) weighted average heat content of 140,000 Btu per gallon; and
- (c) average density of no greater than 7.1 pounds per gallon.

Compliance with the above-mentioned fuel specifications for sulfur, heat content, and density shall be determined by using the analytical results provided by the fuel oil supplier for each shipment of oil. Sampling and analysis of the fuel oil shall be done in accordance with 40 CFR, Part 60, Appendix A, Method 19, or the appropriate ASTM methods, or by an equivalent method approved by the Director of the Ohio EPA.

ii. No. 2 fuel oil usage in this boiler shall be limited to no more than 358,500 gallons per year as measured on a rolling 12-month basis.

iii. The amount of time that this boiler may burn No. 2 fuel oil each year shall be limited to 2000 hours as measured on a rolling 12-month basis.

To ensure federal enforceability of the operations limitation listed above, during the first twelve (12) months of operation under this permit, Casa Verde Growers shall not exceed the total cumulative hours of boiler operation or the cumulative total gallons of No. 2 fuel oil burned in this boiler for each specified time period as shown in the table below:

Initial Cumulative Total Hours Cumulative Total Gallons of  
Months of Operation No. 2 Fuel Oil Burned

1	744	133,362
2	859	153,976
3	973	174,410
4	1088	195,024
5	1202	215,458
6	1317	236,072
7	1431	256,507
8	1546	277,120
9	1660	297,555
10	1775	318,169
11	1889	338,603
12	2000	358,500

The attached form, entitled "Auxiliary Boiler Operations Log", or an approved equivalent, shall be used to record the daily boiler operating hours during which No. 2 fuel oil is burned as required to demonstrate compliance with this permit.

**B. Operational Restrictions**

1. The maximum heat input to this source shall not exceed 25.1 mmBtu per hour, the maximum rated capacity of this boiler.
2. Natural gas shall be used as the primary fuel in this boiler.
3. This boiler shall utilize No. 2 fuel oil only as a backup fuel. The date and time that this emissions unit is operated using fuel oil firing shall be clearly documented in a boiler operating log.

**C. Monitoring and/or Record Keeping Requirements**

1. This facility shall maintain the following records for this source, in addition to those records referred to in Section A.2.1.b. and B.3. above:
  - Daily records of the hours of operation during which this boiler was firing No. 2 fuel oil and the cumulative total hours of such operation on a rolling 12-month basis. These records shall be signed daily by the owner/operator, attesting to the accuracy of the data.
  - For each shipment of No. 2 fuel oil, the volume of oil received and the results of the oil supplier's analyses. Data recorded shall include:
    - i. the total quantity of fuel oil received in each shipment (gallons),
    - ii. the sulfur content (percent) of the oil received in each shipment,
    - iii. the heat content (Btu per gallon) of oil received in each shipment,
    - iv. the density (in pounds per gallon) of the oil received in each shipment,
    - v. the sulfur dioxide emission rate (pounds SO<sub>2</sub> per million Btu actual heat input) from fuel oil received in each shipment.

[Note: The sulfur dioxide emission rate shall be calculated using the formula found in OAC Rule 3745-18-04(F)(2).]

vi. monthly calculations of the weighted average sulfur content, heat content, density, SO<sub>2</sub> emission rate for the oil received during each calendar month, and the total gallons of fuel oil burned in this boiler during the month.

Compliance with the applicable SO<sub>2</sub> emission limitations shall be determined based on the weighted arithmetic

average of all fuel analyses for each calendar month.

[Note: A weighted average fuel quality value is determined by multiplying each fuel analysis value (Btu/gallon, SO<sub>2</sub> emission rate, etc.) by the weight or gallons of the shipment of fuel for which the quality value is representative, adding up all the value-weighted products, and dividing the sum of the value-weighted products by the sum of all the shipment weights or gallons.]

The number of hours of operation using natural gas and the volume of natural gas used/burned each month.

[Note: The volume of natural gas used/burned in this emissions unit may be assigned on a ratio basis using the total monthly natural gas usage for the facility and the ratio of the heat rate of this boiler versus the total heat rate of all permitted boilers operated during the month within the facility.]

**D. Reporting Requirements**

1. The permittee shall notify the Ohio EPA immediately if any of the restrictions in Section A.2.2., "Federally Enforceable Emission Requirements for Sulfur Dioxide", or Section B above are exceeded.  
The weighted average SO<sub>2</sub> emission rate (pounds SO<sub>2</sub> per mmBtu actual heat input) for the fuel oil received during each calendar month;  
The number of hours of boiler operation during which fuel oil was burned during each calendar month;  
For each calendar month, the rolling 12-month total hours of operation during which fuel oil was burned (after the first 12 months of operation under this permit);  
For each calendar month, the rolling 12-month total gallons of fuel oil burned (consumed) in this boiler (after the first 12 months of operation under this permit);  
The level of SO<sub>2</sub> emissions (in tons) for each month as calculated from the monthly amount of oil burned (received) and the weighted average heat content and weighted average SO<sub>2</sub> emissions rate for the oil received;  
A copy of the oil supplier's analyses for each oil shipment received during the reporting period; and  
The volume of natural gas burned in this emissions unit during the year.

Each report shall be submitted by February 15 of each year and shall cover operations of this emissions unit for the previous calendar year.

2. The permittee shall submit annual reports to the Ohio EPA, Northeast District Office, which provide the following information for this emissions unit:  
The total quantity of oil received and burned during each calendar month;  
The weighted average heat content (Btu per gallon) of the oil received during each calendar month;

**E. Testing Requirements**

1. For the purpose of determining compliance with OAC Rule 3745-17-07(A), visible particulate emissions shall be determined according to U.S EPA test method nine (9), "Visible Determination of the Opacity of Emissions from Stationary Sources", as set forth in Chapter 40, Code of Federal Regulations (CFR), Part 60, "Standards of Performance for New Stationary Sources", "Appendix of Test Methods".

**F. Miscellaneous Requirements**

1. FEDERAL ENFORCEABILITY:

Sections A - F of these Special Terms and Conditions constitute the federally enforceable portions of this Permit to Operate.