



State of Ohio Environmental Protection Agency

Street Address:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

P.O. Box 1049
Columbus, OH 43216-1049

1/20/97

CERTIFIED MAIL

02-47-00-0750

RE: Final Chapter 3745-35 Permit To Operate

CASA VERDE GROWERS
Wayne Cousins
Casa Verde Growers
10310 East River Road
Columbia Station, OH 44028

Dear Wayne Cousins:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact the Northeast District Office at (216) 425-9171

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
Jim Orlemann, DAPC Engineering

Becky Castle, DAPC PMU



PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 11/20/97

Facility ID: 02-47-00-0750

Expiration Date: 11/20/00

FINAL ISSUE

This document constitutes issuance for: **CASA VERDE GROWERS**
Casa Verde Growers
10310 East River Road
Columbia Station, OH 44028

of a permit to operate for:

B001 (Kewanee 31.4 mmBtu/hr. Gas/No. 2 Fuel Oil-Fired Boiler)
Kewanee 31.4 mmBtu/hr. natural gas/No. 2 fuel oil-fired boiler used for greenhouse space heating.

PART I General Terms & Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

4. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of three years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

5. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

6. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permittee. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

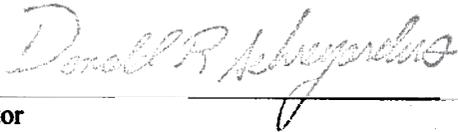
The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(216) 425-9171

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate DO or LAA.

10. The permittee is also subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY



Director

Part II: Special Terms and Conditions

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 31.4 mmBtu/hr. Nat. Gas/No. 2 Fuel Oil-Fired Boiler (B001)	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 2.75 tons. b. Sulfur dioxide (SO ₂) emissions from this facility shall not exceed 26.54 tons per year. SO ₂ emissions from this gas/No.2 fuel oil-fired emissions unit (B001) shall not exceed 2.16 pounds per hour (annual average) and 9.48 tons per year. (See "Federally Enforceable Emission Requirements for Sulfur Dioxide" below.)

2. Additional Terms and Conditions

1. VISIBLE EMISSION RESTRICTIONS:

- 1.a. 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.
- 1.b. 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.

 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.

2. FEDERALLY ENFORCEABLE EMISSION REQUIREMENTS FOR SULFUR DIOXIDE:

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Facility Name: CASA VERDE GROWERS
Facility ID: 02-47-00-0750
Emissions Unit: Kewanee 31.4 mmBtu/hr. Gas/No. 2 Fuel Oil-Fir

2. Additional Terms and Conditions (continued)

- 2.a. 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 B002 and B003, with maximum heat input rates of 31.4 and 25.1 mmBtu/hr. respectively) collectively will have federally enforceable allowable SO₂ emissions of 17.06 tons per year, the annual allowable emissions from this gas/No. 2 fuel oil-fired boiler (B001) shall not exceed 9.48 tons.
- 2.b. This annual sulfur dioxide emissions limitation on source B001 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 448,500 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.
- 2.c. 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 Months	Cumulative Total Hours of Operation	Cumulative Total Gallons of No. 2 Fuel Oil Burned
1	744	166,842
2	859	192,631
3	973	218,195
4	1088	243,984
5	1202	269,548
6	1317	295,337
7	1431	320,902
8	1546	346,690
9	1660	372,255
10	1775	398,044
11	1889	423,608
12	2000	448,500

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 (continued)

- 1. The maximum heat input to this source shall not exceed 31.4 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:
 - 1.a. 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.
 - 1.b. 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 SO₂ 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, SO₂ 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 SO₂ 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, SO₂ 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.]

- 1.c. 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 submit deviation (excursion) reports that identify all periods during which any of the restrictions in the "Federally Enforceable Requirements for Sulfur Dioxide" or in section B are exceeded. These reports shall be submitted to the Ohio EPA within 30 days of each such exceedance and shall include the following information:
 - a. the date of each exceedance;
 - b. the nature or type of each deviation (i.e., coal quality, cumulative hours of operation, etc.); and
 - c. the corrective action taken to rectify the condition which caused the excursion.
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;

The weighted average SO₂ emission rate (pounds SO₂ per mmBtu actual heat input) for the fuel oil received during each calendar month;
- 2.d. The number of hours of boiler operation during which fuel oil was burned during each calendar month;

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Facility Name: CASA VERDE GROWERS
Facility ID: 02-47-00-0750
Emissions Unit: Kewanee 31.4 mmBtu/hr. Gas/No. 2 Fuel Oil-Fir

D. Reporting Requirements (continued)

- 2.e. 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);
- 2.f. 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);
- 2.g. The level of SO₂ 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 SO₂ emissions rate for the oil received;
- 2.h. A copy of the oil supplier's analyses for each oil shipment received during the reporting period; and
- 2.i. 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.

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.



PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 11/20/97

Facility ID: 02-47-00-0750

Expiration Date: 11/20/00

FINAL ISSUE

This document constitutes issuance for:

CASA VERDE GROWERS
Casa Verde Growers
10310 East River Road
Columbia Station, OH 44028

of a permit to operate for:

B002 (Kewanee 31.4 mmBut/hr. Gas/No.2 Fuel Oil-Fired Boiler)
Kewanee 31.4 mmBtu/hr. natural gas/No. 2 fuel oil-fired boiler used for greenhouse space heating.

PART I General Terms & Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

4. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of three years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

5. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

6. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permittee. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

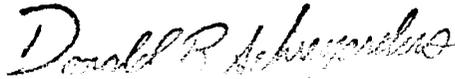
The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(216) 425-9171

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate DO or LAA.

10. The permittee is also subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY



Director

Part II: Special Terms and Conditions

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 31.4 mmBtu/hr. Nat. Gas/No. 2 Fuel Oil-Fired Boiler (B002)	OAC Rule 3745-17-07(A) OAC Rule 3745-17-10(B)(1) OAC Rule 3745-18-04	<p>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 2.75 tons.</p> <p>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 (B002) shall not exceed 2.16 pounds per hour (annual average) and 9.48 tons per year. (See "Federally Enforceable Emission Requirements for Sulfur Dioxide" below.)¹</p>

2. Additional Terms and Conditions

1. VISIBLE EMISSION RESTRICTIONS:

- 1.a. 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.
- 1.b. 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.

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.

2. FEDERALLY ENFORCEABLE EMISSION REQUIREMENTS FOR SULFUR DIOXIDE:

2. Additional Terms and Conditions (continued)

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 B003, with maximum heat input rates of 31.4 and 25.1 mmBtu/hr. respectively) collectively will have federally enforceable allowable SO₂ emissions of 17.06 tons per year, the annual allowable emissions from this gas/No. 2 fuel oil-fired boiler (B002) shall not exceed 9.48 tons.

This annual sulfur dioxide emissions limitation on source B002 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 448,500 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 Months	Cumulative Total Hours of Operation	Cumulative Total Gallons of No. 2 Fuel Oil Burned
1	744	166,842
2	859	192,631
3	973	218,195
4	1088	243,984
5	1202	269,548
6	1317	295,337
7	1431	320,902
8	1546	346,690
9	1660	372,255
10	1775	398,044
11	1889	423,608
12	2000	448,500

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 (continued)

1. The maximum heat input to this source shall not exceed 31.4 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.

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Facility Name: CASA VERDE GROWERS

Facility ID: 02-47-00-0750

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Emissions Unit: Kewanee 31.4 mmBut/hr. Gas/No.2 Fuel Oil-Fir

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:
 - 1.a. 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.
 - 1.b. 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:

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 SO₂ 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, SO₂ 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 SO₂ 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, SO₂ 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.]

- 1.c. 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 submit deviation (excursion) reports that identify all periods during which any of the restrictions in the "Federally Enforceable Requirements for Sulfur Dioxide" or in section B are exceeded. These reports shall be submitted to the Ohio EPA within 30 days of each such exceedance and shall include the following information:
 - a. the date of each exceedance;
 - b. the nature or type of each deviation (i.e., coal quality, cumulative hours of operation, etc.); and
 - c. the corrective action taken to rectify the condition which caused the excursion.
2. The permittee shall submit annual reports to the Ohio EPA, Northeast District Office, which provide the following information for this emissions unit:
 - 2.a. 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;
 - 2.c. The weighted average SO₂ emission rate (pounds SO₂ 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;

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Facility Name: CASA VERDE GROWERS
Facility ID: 02-47-00-0750
Emissions Unit: Kewanee 31.4 mmBut/hr. Gas/No.2 Fuel Oil-Fir

D. Reporting Requirements (continued)

- 2.e. 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);
- 2.f. 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);
- 2.g. The level of SO₂ 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 SO₂ emissions rate for the oil received;
- 2.h. A copy of the oil supplier's analyses for each oil shipment received during the reporting period; and
- 2.i. 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.

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.



PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 11/20/97

Facility ID: 02-47-00-0750

Expiration Date: 11/20/00

FINAL ISSUE

This document constitutes issuance for:

CASA VERDE GROWERS
Casa Verde Growers
10310 East River Road
Columbia Station, OH 44028

of a permit to operate for:

B003 (Kewanee 25.1 mmBtu/hr. Gas/No.2 Fuel Oil-Fired Boiler)
Kewanee 25.1 mmBtu/hr. natural gas/No. 2 fuel oil-fired boiler used for greenhouse space heating

PART I General Terms & Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

4. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of three years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

5. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

6. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permittee. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

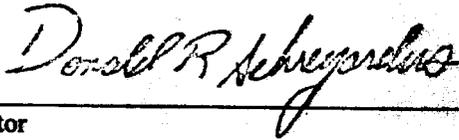
The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(216) 425-9171

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate DO or LAA.

10. The permittee is also subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY



Director

Part II: Special Terms and Conditions

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	<p>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.</p> <p>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.)</p>

2. Additional Terms and Conditions

1 VISIBLE EMISSION RESTRICTIONS

- 1.a. 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.
- 1.b. 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.

2. FEDERALLY ENFORCEABLE EMISSION REQUIREMENTS FOR SULFUR DIOXIDE:

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Facility Name: CASA VERDE GROWERS
Facility ID: 02-47-00-0750
Emissions Unit: Kewanee 25.1 mmBtu/hr. Gas/No.2 Fuel Oil-Fir

2. Additional Terms and Conditions (continued)

2.a. 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.

2.b. 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.

2.c. 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 Months	Cumulative Total Hours of Operation	Cumulative Total Gallons of 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 (continued)

- 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:
 - 1.a. 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.
 - 1.b. 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 SO₂ 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, SO₂ 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 SO₂ 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, SO₂ 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 submit deviation (excursion) reports that identify all periods during which any of the restrictions in the "Federally Enforceable Requirements for Sulfur Dioxide" or in section B are exceeded. These reports shall be submitted to the Ohio EPA within 30 days of each such exceedance and shall include the following information:
 - a. the date of each exceedance;
 - b. the nature or type of each deviation (i.e., coal quality, cumulative hours of operation, etc.); and
 - c. the corrective action taken to rectify the condition which caused the excursion.The weighted average SO₂ emission rate (pounds SO₂ per mmBtu actual heat input) for the fuel oil received during each calendar month;
- 1.d. The number of hours of boiler operation during which fuel oil was burned during each calendar month;
- 1.e. 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);
- 1.f. 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);
- 1.g. The level of SO₂ 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 SO₂ emissions rate for the oil received;

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Facility Name: CASA VERDE GROWERS
Facility ID: 02-47-00-0750
Emissions Unit: Kewanee 25.1 mmBtu/hr. Gas/No.2 Fuel Oil-Fir

D. Reporting Requirements (continued)

- 1.h. A copy of the oil supplier's analyses for each oil shipment received during the reporting period; and
- 1.i. 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:
 - 2.a. The total quantity of oil received and burned during each calendar month;
 - 2.b. The weighted average heat content (Btu per gallon) of the oil received during each calendar month;

E. Testing Requirements (continued)

- 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.