



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 13-03993

DATE: 8/1/2002

Deans Greenhouse, Incorporated
Larry Dean
3984 Porter Road
Westlake, OH 44145

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it 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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Michael W. Ahern Division of Air Pollution Control

CC: USEPA

CBAPC



**Permit To Install
Terms and Conditions**

**Issue Date: 8/1/2002
Effective Date: 8/1/2002**

FINAL PERMIT TO INSTALL 13-03993

Application Number: 13-03993
APS Premise Number: 1318612456
Permit Fee: **\$400**
Name of Facility: Deans Greenhouse, Incorporated
Person to Contact: Larry Dean
Address: 3984 Porter Road
Westlake, OH 44145

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3984 Porter Road
Westlake, Ohio**

Description of proposed emissions unit(s):
Waste oil 12.6 mmBTU/hr boiler -- B002.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. 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.)

3. 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 five 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 this permit. Such records may be maintained in computerized form.

4. 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 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.

5. 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 units 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 the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

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

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

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and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| PE | 18.1 |
| NOx | 7.5 |
| SO2 | 22.0 |
| CO | 1.97 |
| OC | 0.39 |

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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> |
|--|--------------------------------------|--|
| B002 - 12.6 mm Btu boiler modification to include the use of used oil as primary fuel in this emissions unit | OAC rule 3745-31-05(A)(3) | LIMIT(s) 1.7 lb NO _x /hr and 7.5 ton NO _x /yr; 0.45 lb CO/hr and 1.97 ton CO/yr; 0.09 lb OC/hr and 0.39 ton OC/yr; 5.02 lb SO ₂ /hr and 22.0 ton SO ₂ /yr; 4.15 lb PE/hr and 18.1 ton of PM/yr |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule from the stack |
| | OAC rule 3745-17-10(B) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to rule OAC 3745-31-05(A)(3). |
| | OAC rule 3745-18-06(D) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to rule OAC 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a This emissions unit was installed in 1969 and later modified in 1985 and, therefore, not currently subject to the requirements specified in 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

- 2.b** All 'off-spec' used oil burned in this emissions unit shall meet the following specifications:

| <u>Contaminant/Property</u> | <u>Allowable Specifications</u> |
|-----------------------------|---------------------------------|
| PCBs | 50 ppm, maximum |
| total halogens | 4,000 ppm, maximum |
| heat content | 135,000 Btu/gallon, minimum |

If the permittee is burning used oil with any quantifiable level (above 2 ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62. of 40 CFR 279.62.

Used oil (both 'off-spec' and 'on-spec') containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-58-50. Therefore, the permittee may receive and burn used oil exceeding 1,000 ppm of total halogens (but less than 4,000 ppm, maximum) only if the supplier ["marketer" in 40 CFR Part 266.43(a)] has demonstrated to Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

B. Operational Restrictions

1. The permittee shall burn only used oil in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than used oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of used oil (both 'off-spec' and 'on-spec') that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Cleveland Bureau of Air Pollution Control.
3. For each shipment of oil ('on-spec' used oil and 'off-spec' used oil) received for burning in this emissions unit, the permittee shall maintain records of the total quantity of each type of oil received and the permittee's or oil supplier's analysis for sulfur content and heat content.

4. The permittee shall receive a chemical analysis with each shipment of on-spec or off-spec used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's U.S. EPA identification number, and the following information:
 - a. date of shipment or delivery,
 - b. quantity of used oil received,
 - c. the Btu value of the used oil,
 - d. the flash point of the used oil,
 - e. the arsenic content,
 - f. the cadmium content,
 - g. the chromium content,
 - h. the lead content,
 - i. the PCB content,
 - j. the total halogen content, and
 - k. the mercury content.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the director (the Cleveland Bureau of Air Pollution Control) upon verbal or written request. The director or any authorized representative of the director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any off-spec used oil shipment received by this facility, of any off-spec used oil stored at this facility, or of any off-spec used oil sampled.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than used oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the USEPA and the Cleveland Bureau of Air Pollution Control if any of the used oil exceeds the used oil specifications. An identification number from USEPA shall be obtained prior to the combustion of any used oil.

Before the permittee accepts the first shipment of any off-specification used oil from a marketer, the permittee must provide the marketer a one-time, written and signed notice certifying that:

- a. the company has notified USEPA of its used oil management activities and that the notice included the location and description of those activities; and
- b. the company will burn the used oil only in an industrial furnace or boiler identified in 40 CFR Part 266.41(b) and OAC rule 3745-58-42.

A copy of each certification notice that the permittee sends to a marketer must be kept on file for

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a minimum of 5 years from the date it last received off-specification used oil from that marketer.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -

20% opacity, as a six-minute average

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

- b. Emission Limitation -

4.15 lb PE/hr.

Applicable Compliance Method -

Compliance with this emissions limitation shall be based upon multiplying the maximum used fuel oil capacity of the emissions unit (0.09×10^3 gals/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.11-1 (10/96) for filterable particulates in waste oil combustion ($64A$ lb of particulates/ 10^3 gal), A being the ash content of 0.72%.

Emission Limitation -

18.18 ton PE/yr

Applicable Compliance Method -

Compliance with the ton per year limit shall be demonstrated by multiplying the maximum emission rate calculated above (4.15 lbs PM/hr), times 8760 hours/yr, and divided by 2000 lbs/ton, = 18.1 tons/year; or emissions may be calculated, the same, using the actual annual hours of operation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9) while firing waste fuel oil.

- c. Emission Limitation -

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1.7 lb NO_x /hr.

Applicable Compliance Method -

Compliance with this emissions limitation shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (0.09×10^3 gals/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.11-2 (10/96) for nitrogen oxide in used oil combustion ($19 \text{ lbs}/10^3 \text{ gal}$) = 1.7 lbs NOx/hr.

Emission Limitation -

7.5 ton NOx/yr

Applicable Compliance Method -

The TPY emission rate shall be determined by multiplying the maximum emission rate calculated above (1.7 lbs NOx/hr) times 8760 hours/yr, and divided by 2000 lbs/ton = 7.5 tons NOx/year; or estimated actual emissions may be calculated using the actual annual hours of operation.

d. Emission Limitation -

0.45 lb CO /hr.

Applicable Compliance Method -

Compliance with this emissions limitation shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (0.09×10^3 gals/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.11-2 (10/96) for carbon monoxide in used oil combustion ($5 \text{ lbs}/10^3 \text{ gal}$) = 0.45 lbs CO/hr.

Emission Limitation -

1.97 ton CO/yr

Applicable Compliance Method -

The TPY emission rate shall be determined by multiplying the maximum emission rate calculated above (0.45 lbs CO/hr) times 8760 hours/yr, and divided by 2000 lbs/ton = 1.97 tons CO/year; or estimated actual emissions may be calculated using the actual annual hours of operation.

e. Emission Limitation -

0.09 lb OC /hr.

Applicable Compliance Method -

Compliance with this emissions limitation shall be based upon multiplying the maximum

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fuel oil capacity of the emissions unit (0.09×10^3 gals/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.11-3 (10/96) for volatile organic compounds in used oil combustion ($1 \text{ lbs}/10^3 \text{ gal}$) = 0.09 lbs OC/hr.

Emission Limitation -
0.39 ton OC/yr

Applicable Compliance Method -

The TPY emission rate shall be determined by multiplying the maximum emission rate calculated above (0.09 lbs OC/hr) times 8760 hours/yr, and divided by 2000 lbs/ton = 0.39 tons OC/year; or estimated actual emissions may be calculated using the actual annual hours of operation.

f. Emission Limitation -

5.02 lb SO₂/hr

Applicable Compliance Method -

Compliance with this emissions limitation shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (0.09 x 10³ gals/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.11-2 (10/96) for sulfur dioxide in used oil combustion (147S lbs/10³ gal), S being the sulfur content of 0.38% = 5.02 lbs SO₂/hr.

Emission Limitation -
22 ton SO₂/yr

The TPY emission rate shall be determined by multiplying the emission rate calculated above times 8760 hours/yr, and divided by 2000 lbs/ton; or emissions may be calculated, the same, using the actual annual hours of operation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6, while firing waste fuel oil.

F. Miscellaneous Requirements

None