



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MAHONING 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: 02-18005

DATE: 6/19/2003

Environmental Specialists, Inc.
Kenneth Walls
PO Box 337
McDonald, OH 44437

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

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

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/19/2003
Effective Date: 6/19/2003**

FINAL PERMIT TO INSTALL 02-18005

Application Number: 02-18005
APS Premise Number: 0250111019
Permit Fee: **\$200**
Name of Facility: Environmental Specialists, Inc.
Person to Contact: Kenneth Walls
Address: PO Box 337
McDonald, OH 44437

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1101 Andrews Ave.
Youngstown, Ohio**

Description of proposed emissions unit(s):
1 mmBtu/hr boiler fueled with used oil.

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

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

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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

Environmental Specialists, Inc.
PTI Application: 02-18005
Issued: 6/19/2003

Facility ID: 0250111019

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>
NOx	1.27
SO2	4.83
CO	0.35
PM	2.10
OC	0.09

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.

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

B001 - 1 mmBtu/hr boiler fired with used oil
OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-10(C)(1)

OAC rule 3745-18-06(B)

Applicable Emissions
Limitations/Control Measures

0.29 lb/hr, 1.27 TPY NO_x
emissions

0.08 lb/hr, 0.35 TPY CO emissions

0.02 lb/hr, 0.09 TPY OC emissions

1.10 lb/hr, 4.83 TPY SO₂ emissions

0.48 lb/hr, 2.10 TPY PM emissions

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).

See Section A.2.2.a

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the burning of used oil or natural gas.
- 2.b** The lb/hr emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limit.

B. Operational Restrictions

- The permittee shall burn only used oil or natural gas in this emissions unit.
- All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specification
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 ppm, maximum
Lead	100 ppm, maximum
PCB's	10 ppm, maximum*
Total halogens	4000 ppm, maximum**
Mercury	1 ppm, maximum
Flash point	100°F, minimum
Heat content	135,000 Btu/gallon, minimum

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

**Used oil containing more than 1000 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 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total

halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

3. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:
 - a. A sulfur content not to exceed 0.50% which is sufficient to comply with the allowable sulfur dioxide emission limitation.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than used oil or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
 - a. the date of shipment or delivery,
 - b. the quantity of used oil received,
 - c. the Btu value of the used oil, in BTU/gallon,
 - d. the flash point of the used oil, in degrees F,
 - e. the arsenic content, in ppm,
 - f. the cadmium content, in ppm,
 - g. the chromium content, in ppm,
 - h. the lead content, in ppm,
 - i. the PCB content, in ppm,
 - j. the total halogen content, in ppm, and
 - k. the mercury content, in ppm.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) 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 used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

Environmental Specialists, Inc.

PTI Application: 02-19005

Issued

Facility ID: 0250111019

Emissions Unit ID: B001

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses 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 appropriate Ohio EPA District Office or local air agency.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than used oil or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify USEPA and Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11 within 5 days of occurrence. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule and all applicable regulations pertaining to the burning of waste oil.
3. Sulfur Content in Oil Limitation:
The permittee shall submit deviation (excursion) reports which identify all exceedances of the sulfur content limitation for oil combusted in this emissions unit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:
 - 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 in 40 CFR, Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
0.29 lb/hr, 1.27 TPY NO_x emissions

Applicable Compliance Method:
The emission limitations were based upon emission factors from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.11, Table 1.11-2. (10/96). Compliance with the hourly emission limitation shall be determined by multiplying the 19 lbs NO_x/10³ gal emission factor by the maximum used oil usage rate of the boiler (15 gal/hr). Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton.

13

Enviro

PTI A

Issued: 6/19/2003

Emissions Unit ID: **B001**

- c. Emission Limitation:
0.08 lb/hr, 0.35 TPY CO emissions

Applicable Compliance Method:

The emission limitations were based upon emission factors from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.11, Table 1.11-2. (10/96). Compliance with the hourly emission limitation shall be determined by multiplying the 5 lbs CO/10³ gal emission factor by the maximum used oil usage rate of the boiler (15 gal/hr). Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton.

- d. Emission Limitation:
0.02 lb/hr, 0.09 TPY OC emissions

Applicable Compliance Method:

The emission limitations were based upon emission factors from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.11, Table 1.11-3. (10/96). Compliance with the hourly emission limitation shall be determined by multiplying the 1.0 lbs OC/10³ gal emission factor by the maximum used oil usage rate of the boiler (15 gal/hr). Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton.

- e. Emission Limitation:
1.10 lb/hr, 4.83 TPY SO₂ emissions

Applicable Compliance Method:

The emission limitations were based upon emission factors from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.11, Table 1.11-2. (10/96). Compliance with the hourly emission limitation shall be determined by multiplying the (147 * S) lbs SO₂/10³ gal emission factor (where S = the % weight of sulfur in the used oil) by the maximum used oil usage rate of the boiler (15 gal/hr). Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton.

- f. Emission Limitation:
0.48 lb/hr, 2.10 TPY PM emissions

Applicable Compliance Method:

The emission limitations were based upon emission factors from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.11, Table 1.11-1. (10/96). Compliance with the hourly emission limitation shall be determined by multiplying the (64 * A) lbs PM/10³ gal emission factor (where A = the % weight of ash in the used oil) by the maximum used oil usage rate of the boiler (15 gal/hr). Compliance with the annual

Environmental Specialists, Inc.

PTI Application: 02 1005

Issued

Facility ID: 0250111019

Emissions Unit ID: **B001**

emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton.

16

Enviro

PTI A

Issued: 6/19/2003

Emissions Unit ID: **B001**

F. Miscellaneous Requirements

None