



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL
CLARK COUNTY**

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: 08-04303

DATE: 6/4/2002

Envirosure Technologies
Gustave Juengling
15 Village Square
Cincinnati, OH 45246-4514

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,

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

CC: USEPA

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 6/4/2002
Effective Date: 6/4/2002**

FINAL PERMIT TO INSTALL 08-04303

Application Number: 08-04303
APS Premise Number: 0812080485
Permit Fee: **\$800**
Name of Facility: EnviroSURE Technologies
Person to Contact: Gustave Juengling
Address: 15 Village Square
Cincinnati, OH 45246-4514

Location of proposed air contaminant source(s) [emissions unit(s)]:
**11000 C Huntington Rd
South Charleston, Ohio**

Description of proposed emissions unit(s):
dryer for granulated compost.

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

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.

6

EnviroSure Technologies
PTI Application: 08-04303
Issued: 6/4/2002

Facility ID: 0812080485

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>
particulate	11
CO	21.9
VOC	1.54
NOx	25
SO2	1.32

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>
P001 - 30 mmBtu/hr Solid Fuel Fired Compost Dryer with Venturi Wet Scrubber	OAC rule 3745-31-05 (A)(3)	6.45 lbs/hr particulate emissions, 11 TPY particulate emissions
		5 lbs/hr carbon monoxide (CO), 8.57 TPY CO
		0.90 lb/hr VOC, 1.54 TPY VOC
		14.7 lbs/hr NO _x , 25 TPY NO _x
		0.75 lb/hr SO ₂ , 1.32 TPY SO ₂
		10% visible emissions, as a 6-minute average, except as provided by rule
	OAC rule 3745-17-07 (A)	The visible emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
OAC rule 3745-17-11 (B)	The emission limitation specified by this rule is less stringent than the emission limitation	

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PTI A

Issued: 6/4/2002

Emissions Unit ID: **P001**

established pursuant to
OAC rule 3745-31-05
(A)(3).

2. Additional Terms and Conditions

- 2.a The hourly emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. The maximum production rate shall not exceed 3,664.5 tons/month, 43,974 tons/year.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 10 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute at all times while the emissions unit is in operation.
4. The average combustion temperature within the solid fuel burner, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1400 degrees Fahrenheit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the production rate, in tons.
2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. The pressure drop across the scrubber, in inches of water, on a continuous basis.
 - b. The scrubber water flow rate, in gallons per minute, on a continuous basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the solid fuel burner when the emissions

unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record for each day all 3-hour blocks of time during which the average combustion temperature within the solid fuel burner, when the emissions unit was in operation, was less than 1400 degrees Fahrenheit.

D. Reporting Requirements

1. The permittee shall submit annual emission reports for particulate emissions and nitrogen oxides . These reports shall be submitted to the Director (appropriate Ohio EPA District Office local air agency) by January 31 of each year.
2. The permittee shall submit annual reports that identify any exceedances of the annual production rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted to the Director (appropriate Ohio EPA District Office local air agency) by January 31 of each year.
3. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. The static pressure drop across the scrubber.
 - b. The scrubber water flow rate.
4. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the solid fuel burner does not comply with the temperature limitation specified above.

E. Testing Requirements

1. Compliance with the emission limitations for this emissions unit shall be determined in accordance with the following methods:
 - a. Emissions Limitation-
6.45 lbs/hr particulate emissions

Applicable Compliance Method-
This emissions limitation was developed by multiplying the maximum hourly production rate of 12.9 tons/hr by the emission factor of 0.50 lb particulate/ton sludge dried, as derived from stack testing.
 - b. Emissions Limitation-

13

Enviro

PTI A

Issued: 6/4/2002

Emissions Unit ID: **P001**

11 TPY particulate emissions

Applicable Compliance Method-

Compliance shall be based on the sum of the 12-monthly production rates, in tons, as recorded in Section C.1., multiplied by the emission factor of 0.50 lb particulate/ton sludge

dried, as derived from stack testing, and divided by 2000 lbs/ton.

- c. Emissions Limitation-
5 lbs/hr carbon monoxide (CO)

Applicable Compliance Method-

This emissions limitation was developed by multiplying the maximum hourly production rate of 12.9 tons/hr by the emission factor of 0.39 lb CO/ton sludge dried, as derived from stack testing.

- d. Emissions Limitation-
8.57 TPY CO

Applicable Compliance Method-

Compliance shall be based on the sum of the 12-monthly production rates, in tons, as recorded in Section C.1., multiplied by the emission factor of 0.39 lb CO/ton sludge dried, as derived from stack testing, and divided by 2000 lbs/ton.

- e. Emissions Limitation-
0.90 lb/hr volatile organic compounds (VOC)

Applicable Compliance Method-

This emissions limitation was developed by multiplying the maximum hourly production rate of 12.9 tons/hr by the emission factor of 0.07 lb VOC/ton sludge dried, as derived from stack testing.

- f. Emissions Limitation-
1.54 TPY VOC

Applicable Compliance Method-

Compliance shall be based on the sum of the 12-monthly production rates, in tons, as recorded in Section C.1., multiplied by the emission factor of 0.07 lb VOC/ton sludge dried, as derived from stack testing, and divided by 2000 lbs/ton.

- g. Emissions Limitation-
14.7 lbs/hr nitrogen oxides (NOx)
- Applicable Compliance Method-
This emissions limitation was developed by multiplying the dryer's maximum rated heat input of 30 mmBtu/hr by the emission factor of 0.49 lb NOx/mmBtu, found in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1, Table 1.6-2 for dry wood fired boilers, 7/01.
- h. Emissions Limitation-
25 TPY NOx
- Applicable Compliance Method-
Compliance shall be based on the sum of the 12-monthly production rates, in tons, as recorded in Section C.1., multiplied by the derived emission factor of 1.14 lbs NOx/ton sludge dried, and divided by 2000 lbs/ton.
- i. Emissions Limitation-
0.75 lb/hr sulfur dioxides (SO₂)
- Applicable Compliance Method-
This emissions limitation was developed by multiplying the dryer's maximum rated heat input of 30 mmBtu/hr by the emission factor of 0.025 lb SO₂/mmBtu, found in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1, Table 1.6-2 for dry wood fired boilers, 7/01.
- j. Emissions Limitation-
1.32 TPY SO₂
- Applicable Compliance Method-
Compliance shall be based on the sum of the 12-monthly production rates, in tons, as recorded in Section C.1., multiplied by the derived emission factor of 0.06 lb SO₂/ton sludge dried, and divided by 2000 lbs/ton.
- k. Emissions Limitation-
10% visible emissions, as a 6-minute average, except as provided by rule
- Applicable Compliance Method-
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(3) using the methods and procedures specified in 40 CFR

Part 60, Appendix A, Method 9.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days of startup of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, carbon monoxide and nitrogen dioxides.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A; for carbon monoxide, Method 10 of 40 CFR Part 60; and for nitrogen dioxide, Method 7 of 40 CFR Part 60.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

17

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PTI A

Issued: 6/4/2002

Emissions Unit ID: **P001**

None