



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
LORAIN 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: 02-3263**

**DATE: October 14, 1999**

Exochem Corporation  
David Butterworth  
2421 East 28th Street  
Lorain, OH 44055

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  
DAPC, NEDO



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**Permit To Install  
Terms and  
Conditions**

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**Issue Date: October 14, 1999  
Effective Date: October 14, 1999**

**FINAL PERMIT TO INSTALL 02-3263**

Application Number: 02-3263  
APS Premise Number: 0247080297  
Permit Fee: **\$400**  
Name of Facility: Exochem Corporation  
Person to Contact: David Butterworth  
Address: 2421 East 28th Street  
Lorain, OH 44055

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2421 East 28th Street  
Lorain, Ohio**

Description of proposed emissions unit(s):  
**CORE DIVISION BAKING OVEN #1.**

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



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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 are inadequate 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 prove to be inadequate 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.

**14. Construction Compliance Certification**

**Exochem Corporation**  
 PTI Application: **02-3263**  
**October 14, 1999**

Facility ID: **0247080297**

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>
PM	6.09
Organic Compounds	2.74
Nitrogen Oxides	0.88
Carbon Monoxide	0.18

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

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

- 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>
Core Division Baking Oven #1 Indirectly Fired	OAC rule 3745-31-05(A)(3)	Visible emissions from this emissions unit shall not exceed 5 percent opacity as a six minute average.
	OAC rule 3745-17-07 (A)	Less stringent than the limits of OAC rule 3745-31-05.
	OAC rule 3745-17-11	PM: 1.35 pounds per hour; 5.91 tons per year.
	OAC rule 3745-21-07 (G)(1)	OC: 3 pounds per hour, 15 pounds per day; 2.74 tons per year.
Fuel burning equipment	OAC rule 3745-17-10 (B)(1)	PM: 0.020 pound per million BTU of actual heat input. 0.18 ton per year.
	OAC rule 3745-31-05	Organic Compound emissions from fuel burning 0.012 pound per hour; 0.05 ton per year.
		Nitrogen Oxide emissions from natural gas combustion: 0.2 pound per hour and 0.88 ton per year.
		Carbon Monoxide emissions from natural gas combustion: 0.04 pound per hour and 0.18 ton per year.

**2. Additional Terms and Conditions**

None

**B. Operational Restrictions**

1. The temperature of the oven shall not exceed 475 degrees Fahrenheit.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day the emissions unit is in operation:
  - a. The company identification for each core batch.
  - b. The weight, in pounds, of each core batch.
  - c. The organic compound content of each core batch, in pounds per batch.
  - d. The total organic compound emission rate for all core batches, in pounds per day. This information can be obtained from the data received during the most recent stack test.
  - e. The hours of operation.
  - f. The average hourly organic emission rate (d/e).
2. The permittee shall record the temperature of the oven once every 3 hour period while this emissions unit is operating.

**D. Reporting Requirements**

1. The permittee shall submit deviation reports in accordance with the General Terms and Conditions of this permit for all of the following events:
  - a. periods of time the temperature exceeds 475 degrees Fahrenheit.
  - b. the average hourly organic compound emission rate exceeds 3 pounds per hour.
  - c. the daily organic compound emission rate exceeds 15 pounds per day.

## E. Testing Requirements

1. 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 90 days of issuance of this permit to install.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for organic compounds.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 25 or 25A of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - 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 Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. 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 refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

2. Emission Limitation: Visible emissions shall not exceed 5% opacity as a six minute average.  
  
Applicable Compliance Method: Compliance shall be demonstrated by using Method 9 of 40 CFR 60, Appendix A.
3. Emission Limitation: 1.35 pounds of particulate matter per hour.  
  
Applicable Compliance Method: Compliance shall be demonstrated by using Method 5 of 40 CFR 60, Appendix A, if required.
4. Emission Limitation: 5.91 tons of particulate matter per year.  
  
Applicable Compliance Method: Compliance shall be demonstrated by multiplying the allowable emissions rate by actual hours of operation and divide by 2000 (pounds per ton).
5. Emission Limitation: 0.020 pound of particulate matter per million BTU of actual heat input.  
  
Applicable Compliance Method: To determine the actual particulate matter emission rate for natural gas combustion, emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98 or more recent edition) shall be used.
6. Emission Limitation: 0.18 ton of particulate matter per year.  
  
Applicable Compliance Method: Compliance shall be determined by multiplying the allowable emission rate (0.02 lb/MMBTU) by the maximum heat input (2.0 MMBTU/hr) and by 8760 (hours/year) and dividing by 2000 (pounds per ton).
7. Emission Limitation: 0.012 pound of organic compounds per hour  
  
Applicable Compliance Method: Compliance shall be determined by multiplying the oven rating (2 MMBTU/Hr) by the emission factor of 5.8 E-6 (lb/cubic foot) and by 1000 (cubic feet/MMBTU).
8. Emission Limitation: 0.05 ton of organic compounds per year.  
  
Applicable Compliance Method: Compliance shall be determined by multiplying the hourly organic compound emission rate (pounds per hour) by 8760 (hours/year) and dividing by 2000 (pounds per ton).

9. Emission Limitation: 0.04 pound of carbon monoxide per hour.

Applicable Compliance Method: Compliance shall be determined by multiplying the oven rating (2 MMBTU/Hr) by the emission factor of 21 E-6 (lb/cubic foot) and by 1000 (cubic feet/MMBTU).

10. Emission Limitation: 0.18 ton of carbon monoxide per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly organic compound emission rate (pounds per hour) by 8760 (hours/year) and dividing by 2000 (pounds per ton).

11. Emission Limitation: 0.2 pound of nitrogen oxide per hour.

Applicable Compliance Method: Compliance shall be determined by multiplying the oven rating (2 MMBTU/Hr) by the emission factor of 100 E-6 (lb/cubic foot) and by 1000 (cubic feet/MMBTU).

12. Emission Limitation: 0.88 ton of Nitrogen Oxide per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly organic compound emission rate (pounds per hour) by 8760 (hours/year) and dividing by 2000 (pounds per ton).

13. Emission Limitation: 3 pounds of organic compounds per hour.

Applicable Compliance Method: Compliance shall be determined by dividing the amount of organics emitted per day by the daily operating hours.

14. Emission Limitation: 15 pounds of organic compounds per day.

Applicable Compliance Method: Compliance shall be based on the record keeping requirements specified in Section C.

15. Emission Limitation: 2.74 tons of organic compounds per year.

Applicable Compliance Method: Compliance with the annual organic compound emission rate shall be based on the recordkeeping requirements as specified in section C and shall be the sum of the 365 daily emission rates for the calendar year.

**F. Miscellaneous Requirements**

None