OhioEPA

State of Ohio Environmental Protection Agency

Street Address: 1800 WaterMark Drive, Columbus, OH 43215-1099

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

Mailing Address: P.O. Box 1049, Columbus, OH 43216-1049

05/15/97

CERTIFIED MAIL

RE: Proposed Title V Chapter 3745-77 permit
08-57-04-1333
Haarmann & Reimer Corp.

Attn: Genevieve Damico AR-18J
United States Enviromental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Haarmann & Reimer Corp., has been created in Ohio EPA's State Air Resources System (STARS) on 05/15/97, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

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

cc: RAPCA

OhioEPA

Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Date: 05/15/97

PROPOSED

Effective Date:

Expiration Date:

This document constitutes issuance to:

Haarmann & Reimer Corp.
5600 Brentlinger Drive
Dayton, OH 45414-3597

of a Title V permit for Facility ID: 08-57-04-1333

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
B001 (Zurn #1 boiler)
77.24 MMBTU/HR natural gas and #2 oil-fired boiler

B002 (Zurn #2 boiler)
54.3 MMBTU/HR used-oil or 77.24 MMBTU/HR #2 oil or natural gas-fired boiler

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

RAPCA
451 West Third Street
PO Box 972
Dayton, OH 45422
(937) 225-4435

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

   i. The date, place (as defined in the permit), and time of sampling or measurements.

   ii. The date(s) analyses were performed.

   iii. The company or entity that performed the analyses.

   iv. The analytical techniques or methods used.

   v. The results of such analyses.

   vi. The operating conditions existing at the time of sampling or measurement.

b. 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 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

   i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

   ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06.

   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.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-07.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before March 15th of each year during the permit term.

ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC

rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-02(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;

b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

B. State Only Enforceable Section

1. Permit to Install Requirement

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

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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility. Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

P001: Citric Acid Manufacturing Process
P002: 9T1 Citric Acid Dryer
P003: Lime Silo
T002: 3,000 Gallon Pressurized Nitrogen Storage Tank
T003: 8176 Gallon Caustic Soda Storage Tank
T005: 12,000 Gallon Petroleum Naptha Storage Tank
T006: 15,000 Gallon Amine Storage Tank
T007: 32,650 Gallon Oil Storage Tank
T008: 32,650 Gallon Oil Storage Tank
Z001: Stand-by Emergency Generator
Z002: 16,000 Gallon HCl Storage Tank (North)
Z003: 16,000 Gallon HCl Storage Tank (South)
Z004: 15,000 Gallon Ammonia Storage Tank (Pressurized)
Z005: 2,500 Gallon HCl Re-use Tank
Z006: 12,950 Gallon Octanol Storage Tank

2. The permittee is hereby notified that this permit and all agency records concerning these permitted emissions units are subject to public disclosure in accordance with OAC rule 3745-49-03.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Zurn #1 boiler (B001)

Activity Description: 77.24 MMBTU/HR natural gas and #2 oil-fired boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
77.24 MMBTU/HR natural gas or No. 2 oil-fired boiler	3745-17-07(A)	Opacity shall not exceed 20 percent, except for one 6-minute period in any hour when up to 60 percent is permissible.
same as above	3745-18-63(T)	0.8 lb SO2/MMBTU actual heat input
same as above	3745-17-10 (B)(1)	0.020 lb Particulate/MMBTU actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Emissions unit B001 shall be restricted to the use of natural gas or No. 2 fuel oil at all times.

2. The quality of oil burned in this emissions unit shall meet the following specifications on an as-received basis:

a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.8 pound of sulfur dioxide/MMBTU actual heat input; and

b. greater than 135,000 BTU/gallon of oil.

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

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated SO2 emission rate in lb/MMBTU.

III. Monitoring and/or Record Keeping Requirements (continued)

2. 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.

IV. Reporting Requirements

1. The permittee shall notify the Director (appropriate District Office or local air agency) of any deviation of the fuel oil specifications in Section II.2 above. The notification shall include a copy of the record and shall be sent to the Director (appropriate District Office or local air agency) within 45 days after the exceedance occurs.

V. Testing Requirements

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

1.a Emission Limitation -
0.020 lb particulate /MMBTU actual heat input

Applicable Compliance Method -
For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (74,000 cu.ft/hr) by the AP-42 emission factor for natural gas (3 lbs/MMcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (77.24 MMBTU/hr). For the use of No. 2 fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (544 gal/hr) by the AP-42 emission factor for No. 2 fuel oil (2 lb/1000 gal), and dividing by the maximum hourly heat input capacity of the emissions unit (77.24 MMTBU/hr).

1.b Emission Limitation -
0.8 lb SO2/MMBTU actual heat input

Applicable Compliance Method -
Compliance shall be based upon the analytical results of each shipment of oil, using the equation contained in OAC rule 3745-18-04(F)(2) to calculate the actual emission rate.

1.c Emission Limitation -
20% opacity, as a 6-minute average

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
77.24 MMBTU/hr natural gas and No. 2 oil-fired boiler	PTI #08-2281	Particulate Matter: 6.7 TPY; SO2: 271 TPY; Organic Compounds: 0.43 lb/hr, 1.9 TPY; NOx: 10.4 lbs/hr, 45.4 TPY; CO: 10.9 lbs/hr; 47.7 TPY 5% opacity, as a 6-minute average

2. Additional Terms and Conditions

2.a The lbs/hr and TPY limitations specified in this permit were established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation -
6.7 TPY particulate matter

Applicable Compliance Method -
The 6.7 tons per year limitation was developed by multiplying the 1.54 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided that compliance is shown with the 0.020 lb/MMBTU limitation, compliance will also be shown with the annual limitation.

1.b Emission Limitation -
271 TPY SO2

Applicable Compliance Method -
The 271 TPY limitation was developed by multiplying the 61.8 lbs SO2/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the 0.8 lb SO2/MMBTU limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

1.c Emission Limitation -
0.43 lb/hr organic compounds

Applicable Compliance Method -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (5.8 lbs/MM cu.ft) by the maximum hourly gas burning capacity (74,000 cu.ft) of the emissions unit.

1.d Emission Limitation -
1.9 TPY Organic compounds

Applicable Compliance Method -
The 1.9 TPY limitation was developed by multiplying the 0.43 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.e Emission Limitation -
10.4 lbs/hr N0x

Applicable Compliance Limitation -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (140 lbs/MM cu.ft) by the maximum hourly gas burning capacity (74,000 cu.ft) of the emissions unit.

1.f Emission Limitation -
45.4 TPY NOx

Applicable Compliance Method -
The 45.4 TPY limitation was developed by multiplying the 10.4 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.g Emission Limitation -
10.9 lbs/hr CO

Applicable Compliance Method -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (35 lb/MM cu.ft.) by the maximum hourly gas burning capacity (74,000 E4 cu.ft) of the emissions unit.

1.h Emission Limitation -
47.7 TPY CO

Applicable Compliance Method -
The 47.7 TPY limitation was developed by multiplying the 10.9 lbs/hr by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.i Emission Limitation -
5% Opacity, as a 6-minute average

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Zurn #2 boiler (B002)

Activity Description: 54.3 MMBTU/HR used-oil or 77.24 MMBTU/HR #2 oil or natural gas-fired boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
54.3 MMTBU/hr used oil or 77.24 MMBTU/hr No.2 oil or natural gas-fired boiler	PTI # 08-2281	For the burning of recycled used oil: Particulate Matter: 0.24 lb/MMBTU actual heat input, For the burning of natural gas or No. 2 fuel oil: Particulate Matter: 0.020 lb/MMBTU actual heat input,
same as above	3745-18-63(T)	0.8 lb SO2/MMBTU actual heat input
same as above	3745-17-10 (B)(1)	When burning natural gas or No. 2 fuel oil: 0.020 lb/MMBTU particulate matter
same as above	3745-17-07(A)	Opacity shall not exceed 20 percent, except for one 6-minute period in any hour when up to 60 percent is permissible.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Pursuant to OAC rule 3745-17-10, the total heat input for B002, when burning recycled, used oil, is derated from 77.24 MMBTU/hr to 54.3 MMBTU/hr. At no time shall the steam flow rate from B002, when burning recycled, used oil, exceed 41,000 pounds per hour (as an average over any one-hour period).

2. The burning of used oil in this emissions unit shall not exceed the rate of 388 gallons/hr.

II. Operational Restrictions (continued)

3. The quality of No. 2 fuel oil burned in this emissions unit shall meet the following specifications on an as-received basis:

a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.8 lb SO2/MMBTU actual heat input; and

b. greater than 135,000 BTU/gallon oil.

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

III. Monitoring and/or Record Keeping Requirements

1. For each shipment of oil received for burning in this emissions unit, other than recycled used oil, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated SO2 emission rate in lb/MMBTU.

2. The permittee shall continuously monitor and record the steam flow rate from B002. Incremental steam flow readings shall be determined at a frequency of no less than four for each sixty minute period.

3. The permittee shall maintain monthly records for this emissions unit which include the following information:

a. the quantity, in gallons, of recycled, used oil burned;
b. the total number of hours the emission unit was in operation burning recylced, used oil.
c. the average hourly recycled, used oil burn rate, i.e., (a)/(b), in gallons per hour (average).

IV. Reporting Requirements

1. If for any reason the steam flow rate from B002 exceeds 41,000 pounds per hour, as an average when burning recycled, used oil, the following information shall be reported to the Director (appropriate District Office or Local Air Agency) within 5 business days after the exceedance:

a. the date of the exceedance;

b. the time interval over which the exceedance occurred;

c. the value of the exceedance;

d. the cause(s) of the exceedance;

e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and

f. a copy of the steam chart which shows the exceedance.

2. The permittee shall notify the Director (DO or LAA) of any deviation of the fuel oil specifications required in Section II above. The notification shall include a copy of the record and shall be sent to the Director (appropriate District Office or Local Air Agency) within 45 days after the exceedance occurs.

3. The permittee shall submit deviation (excursion) reports which identify each month during which the average hourly recycled, used oil burn rate exceeded 388 gallons/hr and the actual average hourly recycled, used oil burn rate for the month. The report shall be in writing and submitted to the Director (appropriate Ohio EPA District Office or local air agency) within 30 days after the exceedance occurs.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation -
0.020 lb /MMBTU actual heat input (when burning natural gas or No. 2 fuel oil)

Applicable Compliance Method -
For the use of natual gas, compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (74,000 cu.ft/hr) by the AP-42 emission factor for natural gas (3 lbs/MMcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (77.24 MMBTU/hr). For the use of No. 2 fuel oil, compliance shall be determined by multiplying the maximum fuel oil capacity of the emissions unit (544 gal/hr) by the AP-42 emission factor for No. 2 fuel oil (2 lbs/1000 gal) and dividing by the maximum hourly heat input capacity of the emissions unit (77.24 MMBTU/hr).

1.b 0.24 lb/MMBTU particulate matter (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based on stack testing per OAC 3745-17-03(B)(9).

1.c Emission Limitation -
0.8 lb SO2/MMBTU actual heat input (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based upon the analytical results for each shipment of oil, using the equation contained in OAC rule 3745-18-04(F)(2).

1.d Emission Limitation -
20% opacity, as a 6-minute average

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
77.24 MMBTU/hr Natural gas/No. 2 fuel oil or 54.3 MMBTU/hr when burning recycled, used oil	PTI #08-2281	For the burning of natural gas and/or No. 2 fuel oil: PM: 6.74 TPY SO2: 271 TPY OC: 0.43 lb/hr, 1.9 TPY; NOx: 10.4 lbs/hr, 45.4 TPY; CO: 10.9 lbs/hr, 47.7 TPY For the burning of recycled, used oil: Particulate Matter: 57 TPY; SO2: 190 TPY; Arsenic: 0.0014 lb/hr, 0.006 TPY; Cadmium: 0.0046 lb/hr, 0.02 TPY; Chromium: +6: 0.0048 lb/hr, 0.021 TPY; Lead: 0.18 lb/hr, 0.79 TPY 5% opacity, as a 6-minute average

2. Additional Terms and Conditions

2.a The lbs/hr and TPY limitations specified in this permit were established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Specification
Sulfur	0.49% by weight, maximum
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 ppm, maximum
Lead	100 ppm, maximum
PCBs	2 ppm, maximum
Total Halogens	4000 ppm, maximum
Mercury	1 ppm, maximum
Flash Point	100 degrees F, minimum
Heat Content	135,000 BTU/gallon, minimum

II. Operational Restrictions (continued)

2. 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 3745-58-50. 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 Part 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.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of recycled, used oil from the supplier and maintain adequate records of the information. The analysis shall identify the name and address of the supplier, the supplier's U.S. EPA identification number and, at a minimum, include:

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 sulfur content (%) and the calculated SO2 emission rate (lb/MMBTU);
f. the arsenic content;
g. the cadmium content;
h. the chromium content;
i. the lead content;
j. the PCB content;
k. the total halogen content; and
l. the mercury content

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.

2. 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.

3. The permittee shall collect a representative grab sample of oil from the recycled, used oil storage tank on a quarterly basis. The analysis shall be performed in accordance with the test methods specified by OAC rule 3745-54-13 and 40 CFR Part 264.13. The permittee shall perform, or have performed, analyses for the parameters listed in section A.III.1.

4. Any representative of the Ohio EPA or RAPCA may require or may conduct periodic, detailed chemical analysis through an independent laboratory of any recycled, used oil shipment received by this facility or any recycled, used oil storage tank located on the company's site, or of any sample drawn at the boiler (B002) employing recycled, used oil as fuel.

IV. Reporting Requirements

None

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation -
6.74 TPY particulate matter (when burning natural gas or No. 2 fuel oil)

Applicable Compliance Method -
The 6.7 tons per year limitation was developed by multiplying the 1.54 lbs/hr limitation by the maximum operating schedule of 8760 hr/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.b Emission Limitation -
271 TPY SO2 (when burning No. 2 fuel oil as worst case)

Applicable Compliance Method -
The 271 TPY limitation was developed by mulitplying the 61.8 lbs SO2/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.c Emission Limitation -
10.4 lbs/hr NOx (when burning natural gas as worst case)

Applicable Compliance Method -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (140 lb/MM cu.ft) by the maximum hourly gas burning capacity (74,000 cu.ft.) of the emissions unit.

1.d Emission Limitation -
45.4 TPY NOx (when burning natural gas as worst case)

Applicable Compliance Method -
The 45.4 TPY limitation was developed by multiplying the 10.4 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.e Emission Limitation -
0.43 lb/hr organic compounds (when burning natural gas as worst case)

Applicable Compliance Method -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (5.8 lb/MM cu.ft) by the maximum hourly gas burning capacity (74,000 cu.ft) of the emissions unit.

1.f Emission Limitation -
1.9 TPY organic compounds (when burning natural gas as worst case)

Applicable Compliance Method -
The 1.9 TPY limitation was developed by multiplying the 0.43 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.g Emission Limitation -
10.9 lbs/hr CO (when burning natural gas as worst case)

Applicable Compliance Method(s) -
Compliance shall be determined by multiplying the AP-42 emission factor for natural gas (35 lb/MM cu.ft.) by the maximum hourly gas burning capacity (74,000 cu.ft.) of the emissions unit.

1.h Emission Limitation -
47.7 TPY CO (when burning natural gas as worst case)

Applicable Compliance Method -
The 47.7 TPY limitation was developed by multiplying the 10.9 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

1.i Emission Limitation -
57 TPY Particulate Matter (when burning recycled, used oil)

Applicable Compliance Method -
The 57 TPY limitation was developed by multiplying the 13.0 lbs/hr limitation by the maximum operating schedule of 8760 hr/yr, divided by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.j Emission Limitation -
190 TPY SO2 (when burning recycled, used oil)

Applicable Compliance Method -
The 190 TPY limitation was developed by mulitplying the 61.8 lbs SO2/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.k Emission Limitation -
0.0046 lb/hr Cadmium (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based on stack testing using the USEPA Reference Method 29 as specified in 40 CFR Part 60, Appendix A.

1.l Emission Limitation -
0.02 TPY Cadmium (when burning recycled, used oil)

Applicable Compliance Method -
The 0.02 TPY limitation was developed by multiplying the 0.0046 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will be shown with the annual limitation.

1.m Emission Limitation -
0.18 lb/hr Lead (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based on stack testing using the USEPA Reference Method 29 as specified in 40 CFR Part 60, Appendix A.

1.n Emission Limitation -
0.79 TPY Lead (when burning recylced, used oil)

Applicable Compliance Method -
The 0.79 TPY limitation was developed by multiplying the 0.18 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will be shown with the annual limitation.

1.o Emission Limitation -
0.0048 lb/hr Chromium +6 (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based on stack testing using the USEPA Reference Method 29 as specified in 40 CFR Part 60, Appendix A.

1.p Emission Limitation -
0.021 TPY Chromium +6 (when burning recycled, used oil)

Applicable Compliance Method -
The 0.021 TPY limitation was developed by multiplying the 0.0048 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will be shown with the annual limitation.

V. Testing Requirements (continued)

1.q Emission Limitation -
0.0014 lb/hr Arsenic (when burning recycled, used oil)

Applicable Compliance Method -
Compliance shall be based on stack testing using the USEPA Reference Method 29 as specified in 40 CFR Part 60, Appendix A.

1.r Emission Limitation -
0.006 TPY Arsenic (when burning recycled, used oil)

Applicable Compliance Method -
The 0.006 TPY limitation was developed by multiplying the 0.0014 lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will be shown with the annual limitation.

1.s Emission Limitation -
5% opacity, as a 6-minute average

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

2. The permittee shall conduct, or have conducted, performance testing 6 months prior to permit renewal on the air contaminant emissions unit(s), to demonstrate compliance with the allowable mass emissions rate for particulate matter, SO2, arsenic, cadmium, chromium +6, and lead. The emissions test(s) shall be conducted in accordance with the methods and procedures specified in OAC rule 3745-17-03 (for particulate), 3745-18-04(E)(1) (for SO2), 40 CFR Part 60, Appendix A (for arsenic, cadmium, chromium +6, and lead).

2.a The test(s) shall be conducted while the emissions unit is operating at its maximum rated 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), this facility 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 assure that the emissions unit operation and 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 and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

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