



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
SHELBY COUNTY**

CERTIFIED MAIL

Street Address:

Mailing Address:

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

Lazarus Gov.
Center

Application No: 05-14396

Fac ID: 0575010238

DATE: 1/4/2007

Protec PAC USA
Robert Hooper
PO Box 4699
Sidney, OH 453654699

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1400** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

SWDO

IN

Synthetic Minor Determination and/or Netting Determination

Permit To Install: "05-14396"

A. Source Description

Protec (PAC) USA. Sidney facility, has an existing Foam Extrusion Line (P001), which was installed without controls in the last 12 months, at 446 S. Stolle Ave., Sidney, Shelby County, Ohio. This Permit to Install (PTI) is to cover the installation of a new Foam Extrusion Line (P002), a waste grind operation (P004), and warehouse/ product ageing area (P003). This PTI covers overall material usage at the facility and the use of a Regenerative Thermal Oxidizer (RTO) to reduce and minimize the organic compound (OC) emissions from all four emissions units. At present, this facility is defined as a Title V facility with overall allowable OC emissions of 200.00 tons per year. This PTI the overall OC (VOC) emissions will be limited to 228.38 tons, which will maintain this facility as a Title V, but keep them as a synthetic minor under PSD regulations.

B. Facility Emissions and Attainment Status

Shelby County is attainment for all criteria pollutants. Protec (PAC) USA. Sidney . Sidney Facility is defined as a non-major stationary source, at this time, for all criteria pollutants thresholds under Prevention of Significant Deterioration (PSD) standards. The facility is a Title V for VOC.

C. Source Emissions

This PTI will cover the installation of a new process line, a grinding operation, and the warehouse emissions. It also covers the installation a Regenerative Thermal Oxidizer (RTO) that was installed to reduce overall facility VOC emissions.

D. Conclusion

Under this PTI, Protec (PAC) USA , Sidney Facility, Ohio, Plastics Foam Products Plant will be defined as a Title V facility and a minor source under PSD.



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 05-14396

Application Number: 05-14396
Facility ID: 0575010238
Permit Fee: **To be entered upon final issuance**
Name of Facility: Protec PAC USA
Person to Contact: Robert Hooper
Address: PO Box 4699
Sidney, OH 453654699

Location of proposed air contaminant source(s) [emissions unit(s)]:
**456 S. Stolle Avenue
Sidney, Ohio**

Description of proposed emissions unit(s):
Manufacture of polyolefin foam products including two process lines, warehouse, and scrap grinding with incinerator.

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

Laura Powell
Acting Director

Protec PAC USA

PTI Application: 05-14396

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

Facility ID: 0575010238

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

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, 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.
- 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 of federally enforceable 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 emission limitations, operational restrictions, and control device operating parameter limitations, 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 made to the appropriate

Protec PAC USA

PTI Application: 05-14396

Issued: To be entered upon final issuance

Facility ID: 0575010238

Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 shall be submitted pursuant to 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 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

Protec PAC USA

Facility ID: 0575010238

PTI Application: 05-14396

Issued: To be entered upon final issuance

permittee shall comply with the requirement to register such a plan.

Protec PAC USA

PTI Application: 05-14396

Issued: To be entered upon final issuance

Facility ID: 0575010238

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 re-issuance, or modification
- 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, 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 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

8

Protec PAC USA

Facility ID: 0575010238

PTI Application: 05-14396

Issued: To be entered upon final issuance

permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

Protec PAC USA**Facility ID: 0575010238****PTI Application: 05-14396****Issued: To be entered upon final issuance****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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
 - 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

Protec PAC USA**Facility ID: 0575010238****PTI Application: 05-14396****Issued: To be entered upon final issuance**

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.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

12. Air Pollution Nuisance

Protec PAC USA

Facility ID: 0575010238

PTI Application: 05-14396

Issued: To be entered upon final issuance

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.

Protec PAC USA**PTI Application: 05-14396****Issued: To be entered upon final issuance****Facility ID: 0575010238****13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions**1. Compliance Requirements**

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, 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. 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

13

Protec PAC USA

PTI Application: 05-14396

Issued: To be entered upon final issuance
of any transfer of this permit.

Facility ID: 0575010238

Protec PAC USA**Facility ID: 0575010238****PTI Application: 05-14396****Issued: To be entered upon final issuance****4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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.

7. 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).

8. Construction Compliance Certification

Protec PAC USA**Facility ID: 0575010238****PTI Application: 05-14396****Issued: To be entered upon final issuance**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. 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>
OC (VOC)	228.38
NOx	0.66
CO	0.55
PE	0.5
PM10	0.6
SO2	0.004

Protec PAC USA

Facility ID: 0575010238

PTI Application: 05-14396

Issued: To be entered upon final issuance

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P001) - Foam extrusion line 1 with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The calculated potential organic compound emissions from emissions unit shall not exceed 1.12 lbs per hour.</p> <p>The emissions from natural gas and propane combustion in the oxidizer shall not exceed the following:</p> <p>0.15 lb/hr and 0.66 tons/yr nitrogen oxides (NOx) 0.13 lb/hr and 0.55 ton/yr carbon monoxide (CO) 0.01 lb/hr and 0.05 ton/yr filterable particulate emissions (PE) 0.01 lb/hr and 0.06 ton/yr PM10 0.001 lb/hr and 0.004 ton/yr sulfur dioxide (SO2) 0.008 lb/hr and 0.04 ton/yr VOC</p>

Emissions Unit ID: P001

OAC rule 3745-31-05(C)	<p>The Overall combined organic compound (OC) emitted from emissions units P001 and P002 shall not exceed 13.30 tons, based upon a rolling, 12-month summation of the all blowing agent employed.</p> <p>The Overall combined blowing agent employed in emissions units P001 and P002 shall not exceed 1108.8 tons, based upon a rolling, 12-month summation of the all blowing agent employed.</p> <p>The Organic Materials employed in emissions units P001, P002, P003, and P004 shall not be Photochemically Reactive Material (PRM) as defined in OAC rule 3745-21-01(C)(5).</p> <p>The OC emissions from emissions units P001, P002, P003, and P004 shall be reduced by venting some or all OC emissions to a common control device.</p> <p>All the OC emissions emitted within the environmental chambers of emissions units P001 and P002 shall be vented to the single control device.</p> <p>The single control device that is employed to reduce the OC emissions from Emissions units P001, P002, P003 and P004 shall have a destruction efficiency of not less than 98%.</p> <p>(See Section Part III.A.1.2.b. and c.)</p>
OAC rule 3745-21-07(G)(2)	The OC emissions shall not exceed 8 lbs/hr, nor 40 lb/day, whenever Photochemically Reactive (PRM) are employed in this emission unit.
OAC rule 3745-17-10(B)	0.02 lb PE per mmBtu for the fuel burning equipment (incinerator)

2. Additional Terms and Conditions

- 2.a** The hourly emission limitation for OC of 1.12 pounds, is established to reflect potential to emit for this emission unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.
- 2.b** The environmental chambers on emissions units P001 and P002 shall be have a 100% capture efficiency and meet the criteria for a permanent total enclosure, as specified in 40 CFR Part 51, Appendix M, Method 204.
- 2.c** The permittee shall employ a control system that captures all the organic compounds released in the blowing process. In addition, the control device shall have a minimum destruction efficiency of ninety-eight percent (98%), by weight, of the OC emissions vented to it.

Emissions Unit ID: P001

II. Operational Restrictions;

1. Blowing agent usage in emissions units P001 and P002 shall not exceed 1,108.8 tons, based upon a rolling, 12-month summation of the blowing agent usage rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the blowing agent usage in emissions units P001 and P002, combined, specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable blowing agent Usage (tons)</u>
1	111
1-2	222
1-3	333
1-4	444
1-5	555
1-6	666
1-7	758
1-8	850
1-9	942
1-10	1034
1-11	1108.8
1-12	1108.8

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12 month summation of operating hours.

2. This emissions unit shall not employ any liquid organic materials that are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. the combined total amount of blowing agent employed in emissions units P001 and P002, in tons employed;
 - b. the rolling, 12-month combined total amount of blowing agent employed in emissions units P001 and P002, in tons employed. The rolling, 12-month summation of the combined total amount of blowing agent employed in emissions units P001 and P002 (the total amount employed for the current month plus the total amount of OC emissions for the 11 previous calendar months); and

Issued: To be entered upon final issuance

- c. data for each liquid organic material employed in emissions units P001, P002, P003, and P004, that demonstrates that is by definition not Photo Chemically Reactive (PRM).

During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative amount of blowing agent employed for each calendar month.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the actual operating temperature of the regenerative thermal oxidizer (RTO) during operation of emissions units P001-P004, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time average temperature monitored value deviates by more than 50 degrees from the specified operating temperature, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating temperature as specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the 3-hour blocks of time average temperature that was measured after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

Until compliance testing has been conducted, as required in this permit, the average combustion temperature within the thermal incinerator, for any 3-hour block of time

Emissions Unit ID: P001

when the emissions unit is in operation, shall be maintained at the average temperature recommended by the manufacturer of the incinerator, with any modifications deemed necessary by the permittee. Following compliance testing, the average combustion temperature within the thermal incinerator, for any 3-hour block of time the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance.

3. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, all three-hour blocks of time during operation of emissions units P001, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time value deviates from the specified at or above the minimum pressure differential of 0.007 inch of water, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating pressure differential, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure differential of 0.007 inch of water, all three-hour blocks of time during operation after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which any photochemically reactive material was employed.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour

Emissions Unit ID: P001

blocks of time during which the average combustion temperature within the control device did not comply with the temperature limitation specified above.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the combined rolling, 12-month blowing agent usage limitation for emissions units P001 and P002 and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable combined cumulative blowing agent usage levels.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emission limitation.
5. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a three-hour average.

V. Testing Requirements:

1. Compliance with the emission limitation(s) and operational restriction specified in Sections A.I.1 and A.II shall be determined in accordance with the following methods:

- a. Emission Limitation: 13.30 tons OC/rolling 12-month period

Applicable Compliance Method: The permittee shall determine the monthly OC emission rate by the following equation:

$$E = (\text{BAu}) \times (60\%^*) \times (1 - \text{Ox}\%)$$

where,

E = OC emission rate (tons/12-month rolling period);

BAu = 12-month rolling blowing agent usage rate, in tons (1108.8 tons/ 12-month rolling period, based on PTI Allowable);

and

Ox% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

* 60%, by weight, of blowing agent used that is captured by the enclosures at the extrusion line, as determined by best available engineering data (this percent by weight, will be required to be demonstrated through a compliance stack test).

The permittee shall determine the rolling 12-month OC emission rate by summing the monthly OC emission rates for each 12-month period.

- b. Emission Limitation: 1.12 lbs/hr, potential

Issued: To be entered upon final issuance

Applicable Compliance Method: The permittee shall determine the hourly OC emission rate from emissions unit P001 by the following equation:

$$E = (\text{BAu}) \times (60\%^*) \times (1 - \text{Ox}\%)$$

where,

E = OC emission rate (lb/hr);

BAu = maximum potential hourly blowing agent usage, in lbs (93.1lbs/hr, based on PTI Application and calculation sheets); and

Ox% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

* 60%, by weight, of blowing agent used that is captured by the enclosures at the extrusion line, as determined by best available engineering data (this percent by weight, will be required to be demonstrated through a compliance stack test).

2. The permittee shall conduct, or have conducted, emission testing(s) on the regenerative thermal oxidizer and the associated capture systems so as to demonstrate compliance with the above listed requirements.
 - a. The emission testing(s) shall be conducted within 6 months of the startup of the RTO and Line2.
 - b. The emission testing(s) shall be conducted to demonstrate compliance with the require destruction of efficiency of the control device and the capture requirements of the environmental chambers on emissions units P001 and P002.
 - c. The following test methods shall be employed to demonstrate compliance with the require efficiencies.

Destruction Efficiency of the common control device: The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Emissions Unit ID: P001

Capture Efficiency of the environmental chambers: The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

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 emission units being controlled by the control device(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest 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, Southwest 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA 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.

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P001) - Foam extrusion line 1 with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for emission units P001 - P004, combined, was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isobutane

TLV (mg/m³): 1900

Maximum Hourly Emission Rate (lbs/hr): 1.12 (P001)

Issued: To be entered upon final issuance

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3):5078.52

MAGLC (ug/m3): 45,200

*Based on total emissions from P001-P004

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

Protec PAC USA

DTL Application: 05 14306

Facility ID: 0575010238

Emissions Unit ID: P001

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P002) - Foam extrusion line 2 with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-31-05(C) (Synthetic minor to avoid PSD Threshold)</p>	<p>The Overall combined organic compound (OC) emitted from emissions units P001 and P002 shall not exceed 13.30 tons, based upon a rolling, 12-month summation of the all blowing agents usage.</p> <p>The Overall combined blowing agent usage in emissions units P001 and P002 shall not exceed 1108.8 tons, based upon a rolling, 12-month summation of the all blowing agent employed.</p> <p>The Organic Materials employed in emissions units P001, P002, P003, and P004 shall not be Photochemically Reactive Material (PRM) as defined in OAC rule 3745-21-01(C)(5).</p> <p>The OC emissions from emissions units P001, P002, P003, and P004 shall be reduced by venting some or all OC emissions to a common control device.</p> <p>All the OC emissions emitted within the environmental chambers of emissions units P001 and P002 shall be vented to the single control device.</p> <p>The single control device) that is employed to reduce the OC emissions from Emissions units P001, P002, P003 and P004 shall have a destruction efficiency of not less than 98%.</p> <p>(See Section Part III.A.I.2.a., b. and c.)</p>

Issued: To be entered upon final issuance

OAC rule 3745-21-07(G)(2)	The OC emissions shall not exceed 8 lbs/hr, nor 40 lb/day, whenever Photochemically Reactive (PRM) are employed in this emission unit.
OAC rule 3745-17-10(B)	0.02 lb PE per mmBtu for the fuel burning equipment (incinerator)

2. Additional Terms and Conditions

- 2.a** This emissions unit shall not employ any liquid organic materials that are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).
- 2.b** The environmental chambers on emissions units P001 and P002 shall have a 100% capture efficiency and meet the criteria for a permanent total enclosure, as specified in 40 CFR Part 51, Appendix M, Method 204.
- 2.c** The permittee shall employ a control system that captures all the organic compounds released in the blowing process. In addition, the control device shall have a minimum destruction efficiency of ninety-eight percent (98%), by weight, of the OC emissions vented to it.

II. Operational Restrictions;

1. Blowing agent usage in emissions units P001 and P002 shall not exceed 1,108.8 tons, based upon a rolling, 12-month summation of the blowing agent usage rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the blowing agent usage in emissions units P001 and P002, combined, specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable blowing agent Usage (tons)</u>
1	111
1-2	222
1-3	333
1-4	444
1-5	555
1-6	666
1-7	758
1-8	850
1-9	942
1-10	1034

Protec PAC USA

DTI Application: 05 14306

Facility ID: 0575010238

Emissions Unit ID: P002

1-11	1108.8
1-12	1108.8

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12 month summation of operating hours.

Issued: To be entered upon final issuance

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. the combined total amount of blowing agent employed in emissions units P001 and P002, in tons employed;
 - b. the rolling, 12-month combined total amount of blowing agent employed in emissions units P001 and P002, in tons employed. The rolling, 12-month summation of the combined total amount of blowing agent employed in emissions units P001 and P002 (the total amount employed for the current month plus the total amount of OC emissions for the 11 previous calendar months); and
 - c. data for each liquid organic material employed in emissions units P001, P002, P003, and P004, that demonstrates that is by definition not Photo Chemically Reactive (PRM).

During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative amount of blowing agent employed for each calendar month.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the actual operating temperature of the regenerative thermal oxidizer (RTO) during operation of emissions units P001-P004, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time average temperature monitored value deviates by more than 50 degrees from the specified operating temperature, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating temperature as specified below, unless the

Issued: To be entered upon final issuance

permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the 3-hour blocks of time average temperature that was measured after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

Until compliance testing has been conducted, as required in this permit, the average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall be maintained at the average temperature recommended by the manufacturer of the incinerator, with any modifications deemed necessary by the permittee. Following compliance testing, the average combustion temperature within the thermal incinerator, for any 3-hour block of time the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance.

3. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, all three-hour blocks of time during operation of emissions units P001, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time value deviates from the specified at or above the minimum pressure differential of 0.007 inch of water, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating pressure differential, unless the permittee

Emissions Unit ID: P002

determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure differential of 0.007 inch of water, all three-hour blocks of time during operation after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which any photochemically reactive material was employed.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the control device did not comply with the temperature limitation specified above.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the combined rolling, 12-month blowing agent usage limitation for emissions units P001 and P002 and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable combined cumulative blowing agent usage levels.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emission limitation.
5. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a three-hour average.

V. Testing Requirements:

1. Compliance with the emission limitation(s) and operational restriction specified in Sections A.I.1 and A.II shall be determined in accordance with the following methods:
 - a. Emission Limitation: 13.30 tons OC/rolling 12-month period

Applicable Compliance Method: The permittee shall determine the monthly OC emission rate by the following equation:

$$E = (BAu) \times (60\%^*) \times (1-Ox\%)$$

Emissions Unit ID: P002

where,

E = OC emission rate (tons/12-month rolling period);

BAu = 12-month rolling blowing agent usage rate, in tons (1108.8 tons/ 12-month rolling period, based on PTI Allowable);

and

OX% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

* 60%, by weight, of blowing agent used that is captured by the enclosures at the extrusion line, as determined by best available engineering data (this percent by weight, will be required to be demonstrated through a compliance stack test).

The permittee shall determine the rolling 12-month OC emission rate by summing the monthly OC emission rates for each 12-month period.

2. The permittee shall conduct, or have conducted, emission testing(s) on the regenerative thermal oxidizer and the associated capture systems so as to demonstrate compliance with the above listed requirements.
 - a. The emission testing(s) shall be conducted 6 months of the startup of the RTO and Line2.
 - b. The emission testing(s) shall be conducted to demonstrate compliance with the require destruction of efficiency of the control device and the capture requirements of the environmental chambers on emissions units P001 and P002.
 - c. The following test methods shall be employed to demonstrate compliance with the require efficiencies.

Destruction Efficiency of the common control device: The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Capture Efficiency of the environmental chambers: The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the

Issued: To be entered upon final issuance

applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

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 emission units being controlled by the control device(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest 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, Southwest 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA 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.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P002) - Foam extrusion line 2 with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for emission units P001 - P004, combined, was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isobutane

TLV (mg/m3): 1900

Maximum Hourly Emission Rate (lbs/hr): 1.92 (P002)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 8706.03

MAGLC (ug/m3): 45,200

Issued: To be entered upon final issuance

*Based on total emissions from P001-P004

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

Emissions Unit ID: P002

- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P003) - Warehouse emissions with partition goes to incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The Organic Materials employed in this emissions unit P003 shall not be Photochemically Reactive Material (PRM) as defined in OAC rule 3745-21-01(C)(5).</p> <p>The OC emitted from this emissions unit shall not exceed 46.19 lbs /hr.</p> <p>The emissions from natural gas and propane combustion in the oxidizer shall not exceed the following:</p> <p>0.15 lb/hr and 0.66 tons/yr nitrogen oxides (NOx) 0.13 lb/hr and 0.55 ton/yr carbon monoxide (CO) 0.01 lb/hr and 0.05 ton/yr filterable particulate emissions (PE) 0.01 lb/hr and 0.06 ton/yr PM10 0.001 lb/hr and 0.004 ton/yr sulfur dioxide (SO2) 0.008 lb/hr and 0.04 ton/yr VOC</p>

Issued: To be entered upon final issuance

OAC rule 3745-31-05(C) (Synthetic Minor to avoid PSD Threshold)	The OC emitted from this emissions unit shall not exceed 202.30 tons, based upon a rolling, 12-month summation of the all blowing agent employed. The captured emissions from this emissions unit shall be reduced by at least 98% prior to being emitted to the ambient air. The OC emissions off gassed within the warehouse shall be vented in such manner to capture an estimated 40 % of the off gassing and vent the captured emissions to the common control device.
OAC rule 3745-21-07(G)	The OC and CO limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B) (for the incinerator)	0.02 lb PE per mmBtu for the fuel burning equipment (incinerator)
OAC rule 3745-17-07(A) (for the incinerator)	The Visible PE from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

- 2.a** This emissions unit shall be enclosed (inside a building) in such a manner that would vent a portion (assume 40%, based on best engineering estimates) of Off-gassed blowing agent to the control device serving emissions units P001, P002, P003, and P004.

II. Operational Restrictions

1. This emissions unit shall not employ any materials that would cause the emission of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
- a. data for each liquid organic material employed in emissions units P001, P002, P003, and P004, that demonstrates that is by definition not Photo Chemically Reactive (PRM).
2. The permittee shall properly install, operate, and maintain equipment to continuously

Issued: To be entered upon final issuance

monitor and record the actual operating temperature of the regenerative thermal oxidizer (RTO) during operation of emissions units P001-P004, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time average temperature monitored value deviates by more than 50 degrees from the specified operating temperature, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating temperature as specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the 3-hour blocks of time average temperature that was measured after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

Until compliance testing has been conducted, as required in this permit, the average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall be maintained at the average temperature recommended by the manufacturer of the incinerator, with any modifications deemed necessary by the permittee. Following compliance testing, the average combustion temperature within the thermal incinerator, for any 3-hour block of time the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance.

[OAC 3745-21-09(B)(3)(j)(vi)] or [OAC 3745-21-09(B)(3)(l)(ii)] or [OAC 3745-21-09(B)(4)(b)(ii)]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which any photochemically reactive material was employed.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the control device did not comply with the temperature limitation specified above.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emission limitation.
4. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a three-hour average.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Sections A.I.1 and A.II shall be determined in accordance with the following methods:

Issued: To be entered upon final issuance

- a. Emission Limitation: 202.3 tons OC/rolling 12-month period

Applicable Compliance Method: The permittee shall determine the monthly OC emission rate by the following equation:

$$E = (OG \times RV\%) + ((OG \times \text{Capt}\%) \times (1 - OX\%))$$

where,

E = OC emission rate (tons/month);

OG* = Off-gassing of the blowing agent in the warehouse;

RV% = the % of off-gas that is emitted from the building roof vent, (assumed 60% of the blowing agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

Capt% = the % of off-gas that is emitted into the warehouse and is captured and vented to the oxidizer, (assumed 40% of the blow agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

OX% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

* Off-gassing in the warehouse is based on the following equation:

Off-gassing = (Total amount of blowing agent X 40% not emitted in Environment chambers of emissions units P001 and P002)-(Total amount of blowing agent x 10% of blowing agent locked in product)

The permittee shall determine the rolling 12-month OC emission rate by summing the monthly OC emission rates for each 12-month period.

2. The permittee shall conduct, or have conducted, emission testing(s) on the regenerative thermal oxidizer and the associated capture systems so as to demonstrate compliance with the above listed requirements.
- a. The emission testing(s) shall be conducted within 6 months of the startup of the RTO and/or Line2.
- b. The emission testing(s) shall be conducted to demonstrate compliance with the require destruction of efficiency of the control device.
- c. The following test methods shall be employed to demonstrate compliance with

Emissions Unit ID: P003

the require efficiencies.

Destruction Efficiency of the common control device: The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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 emission units being controlled by the control device(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest 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, Southwest 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA 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.

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P003) - Warehouse emissions with portation goes to incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for emission units P001 - P004, combined, was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isobutane

TLV (mg/m³): 1900

Maximum Hourly Emission Rate (lbs/hr): 46.19 (P003)

Emissions Unit ID: P003

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 339.7*

MAGLC (ug/m3): 45,200

* based on the use of two of the four existing roof vents.

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

Issued: To be entered upon final issuance

- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P004) - Scrap grinder with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The Organic Materials employed in this emissions unit P004 shall not be Photochemically Reactive Material (PRM) as defined in OAC rule 3745-21-01(C)(5).</p> <p>The OC emitted from this emissions unit shall not exceed 2.94 lbs /hr.</p> <p>The emissions from natural gas and propane combustion in the oxidizer shall not exceed the following:</p> <p>0.15 lb/hr and 0.66 tons/yr nitrogen oxides (NO_x) 0.13 lb/hr and 0.55 ton/yr carbon monoxide (CO) 0.01 lb/hr and 0.05 ton/yr filterable particulate emissions (PE) 0.01 lb/hr and 0.06 ton/yr PM₁₀ 0.001 lb/hr and 0.004 ton/yr sulfur dioxide (SO₂) 0.008 lb/hr and 0.04 ton/yr VOC</p>

Emissions Unit ID: P004

OAC rule 3745-31-05(C) (Synthetic Minor to avoid PSD Threshold)	The OC emitted from this emissions unit shall not exceed 12.78 tons, based upon a rolling, 12-month summation of the all blowing agent employed. The captured emissions from this emissions unit shall be reduced by at least 98% prior to being emitted to the ambient air. The OC emissions off gassed within the warehouse shall be vented in such manner to capture an estimated 40 % of the off gassing and vent the captured emissions to the common control device.
OAC rule 3745-21-07(G)	The OC and CO limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B) (for the incinerator)	0.02 lb PE per mmBtu for the fuel burning equipment (incinerator)
OAC rule 3745-17-07(A) (for the incinerator)	The Visible PE from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

- 2.a** The hourly emission limitation for OC of 2.94 pounds, is established to reflect potential to emit for this emission unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.
- 2.b** This emissions unit shall be enclosed (inside a building) in such a manner that would vent a portion (assume 40%, based on best engineering estimates) of Off-gassed blowing agent to the control device serving emissions units P001, P002, P003, and P004.

II. Operational Restrictions

1. This emissions unit shall not employ any materials that would cause the emission of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
- a. data for each liquid organic material employed in emissions units P001, P002, P003, and P004, that demonstrates that is by definition not Photo Chemically Reactive (PRM).

Emissions Unit ID: P004

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the actual operating temperature of the regenerative thermal oxidizer (RTO) during operation of emissions units P001-P004, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the RTO actual operating temperature on an 3-hour blocks of time basis.

Whenever the 3-hour blocks of time average temperature monitored value deviates by more than 50 degrees from the specified operating temperature, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and magnitude of the deviation at that time, the date(s) the investigation was conducted, the name of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable operating temperature as specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the 3-hour blocks of time average temperature that was measured after the corrective action, and name(s) of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06, if it is determined that a malfunction has occurred.

Until compliance testing has been conducted, as required in this permit, the average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall be maintained at the average temperature recommended by the manufacturer of the incinerator, with any modifications deemed necessary by the permittee. Following compliance testing, the average combustion temperature within the thermal incinerator, for any 3-hour block of time the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance.

[OAC 3745-21-09(B)(3)(j)(vi)] or [OAC 3745-21-09(B)(3)(l)(ii)] or [OAC 3745-21-09(B)(4)(b)(ii)]

IV. Reporting Requirements

Emissions Unit ID: P004

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which any photochemically reactive material was employed.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the control device did not comply with the temperature limitation specified above.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emission limitation.
4. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a three-hour average.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Sections A.I.1 and A.II shall be determined in accordance with the following methods:

- a. Emission Limitation: 2.94 lbs OC/ hour

Applicable Compliance Method: The permittee shall determine the monthly OC emission rate by the following equation:

$$E = [(Sr \times RBA) \times RV\%] + \{[(Sr \times RBA) \times Capt\%] \times (1 - OX\%)\}$$

where,

E = OC emission rate (lbs/hr);

Sr = Scrap material recycled, (400 lb/hr grinder, Dec. 2006 facility inspection);

RBA* = Retained Blowing Agent that is released during grinding of scrape material in the warehouse;

RV% = the % of off-gas that is emitted from the building roof vent, (assumed 60% of the blow agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

Capt% = the % of off-gas that is emitted into the warehouse and is captured and vented to the oxidizer, (assumed 40% of the blow agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

OX% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

* The amount of blowing agent emitted into the warehouse from the grinding operation is based on the following equation:

Issued: To be entered upon final issuance

Retained Blowing Agent (RBA) = $[(93.1 \text{ lbs/hr} + 160 \text{ lbs/hr}) \times 10\% \text{ of blowing agent trapped in Product}] / (800 \text{ lbs/hr} + 1400 \text{ lbs/hr of foam produced})$
 = 0.012 lbs of blowing agent released/ lb of foam grinded and extruded into pellets.

- b. Emission Limitation: 12.78 tons lbs OC/12-month rolling period

Applicable Compliance Method: The permittee shall determine the monthly OC emission rate by the following equation:

$$E = [(Sr \times RBA) \times RV\%] + \{[(Sr \times RBA) \times Capt\%] \times (1 - OX\%)\}$$

where,

E = OC emission rate (tons/12-month period);

Sr = Scrap material recycled, (worst case is hourly x 8760, 1752 tons/yr);

RBA* = Retained Blowing Agent that is released during grinding of scrape material in the warehouse;

RV% = the % of off-gas that is emitted from the building roof vent, (assumed 60% of the blow agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

Capt% = the % of off-gas that is emitted into the warehouse and is captured and vented to the oxidizer, (assumed 40% of the blow agent emitted in the warehouse is emitted through the roof vent, best available engineering estimate);

OX% = destruction efficiency for the oxidizer, (assumed 98%, from PTI application form).

- * The amount of blowing agent emitted into the warehouse from the grinding operation is based on the following equation:

Retained Blowing Agent (RBA) = $[(93.1 \text{ lbs/hr} + 160 \text{ lbs/hr}) \times 10\% \text{ of blowing agent trapped in Product}] / (800 \text{ lbs/hr} + 1400 \text{ lbs/hr of foam produced})$
 = 0.012 lbs of blowing agent released/ lb of foam grinded and extruded into pellets.

2. The permittee shall conduct, or have conducted, emission testing(s) on the regenerative thermal oxidizer and the associated capture systems so as to demonstrate compliance with the above listed requirements.

Emissions Unit ID: P004

- a. The emission testing(s) shall be conducted within 6 months of the startup of the RTO and/or Line2.
- b. The emission testing(s) shall be conducted to demonstrate compliance with the require destruction of efficiency of the control device.
- c. The following test methods shall be employed to demonstrate compliance with the require efficiencies.

Destruction Efficiency of the common control device: The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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 emission units being controlled by the control device(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest 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, Southwest 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA 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.

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P004) - Scrap grinder with incinerator

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for emission units P001 - P004, combined, was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isobutane

TLV (mg/m³): 1900

Maximum Hourly Emission Rate (lbs/hr): 2.94 (P004)

Emissions Unit ID: P004

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 13,330.3

MAGLC (ug/m3): 45,200

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

Issued: To be entered upon final issuance

- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

Issued: To be entered upon final issuance

V. Testing Requirements

None

VI. Miscellaneous Requirements

None