



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov. Center

**RE: FINAL PERMIT TO INSTALL
FRANKLIN COUNTY
Application No: 01-8034**

CERTIFIED MAIL

DATE: November 17, 1999

Columbus Cello-Poly
Michael Smith
4041 Roberts Road
Columbus, OH 43228

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:



Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA
DAPC, CDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: November 17, 1999

FINAL PERMIT TO INSTALL 01-8034

Application Number: 01-8034
APS Premise Number: 0125041958
Permit Fee: **\$1000**
Name of Facility: Columbus Cello-Poly
Person to Contact: Michael Smith
Address: 4041 Roberts Road
Columbus, OH 43228

Location of proposed air contaminant source(s) [emissions unit(s)]:
4041 Roberts Road
Columbus, Ohio

Description of proposed emissions unit(s):
TWO 6-COLOR FLEXOGRAPHIC PRESSES (K007 AND K008), AND TWO 8-COLOR FLEXOGRAPHIC PRESSES (K009 & K010), INK MIXING ROOM.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Columbus Cello-Poly
PTI Application: 01-8034
Date: November 17, 1999

Facility ID: 0125041958

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

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representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	38.0
NO _x	15.7
CO	1.1
SO ₂	0.08
PM	0.03
Single HAP	9.9
Total HAPs	24.9

Columbus Cello-Poly
PTI Application: 01 0024
Date:

Facility ID: 0125041958

Emissions Unit ID: K007

PART II: SPECIAL TERMS AND CONDITIONS

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

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

6 color flexographic press with two OAC rule 3745-31-05
0.4 MMBtu per hour natural gas
fired (indirect fired) drying ovens.

OAC Rule 3745-21-09(Y)

OAC Rule 3745-17-07(A(1)(a))

ColumnPTI A₁**Date: November 17, 1999**Emissions Unit ID: **K007**

Applicable Emissions
Limitations/Control Measures

The volatile organic compound (VOC) emissions from K007 shall not exceed 1.7 pounds per hour.

Facility-wide HAP limit, see A.2.b.

The nitrogen oxides emissions (NO_x) emissions from each oven shall not exceed 0.04 pound per hour and 0.17 ton per year.

The carbon monoxide emissions (CO) emissions from each oven shall not exceed 0.03 pound per hour and 0.14 ton per year.

The sulfur dioxide emissions (SO₂) emissions from each oven shall not exceed 0.00023 pound per hour and 0.001 ton per year.

The volatile organic compound emissions (VOC) emissions from each oven shall not exceed 0.002 pound per hour and 0.01 ton per year.

The particulate matter emissions (PM) emissions from each oven shall not exceed 0.007 pound per hour and 0.003 ton per year.

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year.

The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

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

2. Additional Terms and Conditions

- 2.a** The combined volatile organic compound (VOC) emissions from K007, K008, K009, K010, and P001 shall not exceed 38.0 tons per year.
- 2.b** The maximum annual combined emissions limitation from this facility shall not exceed 9.9 tons and 24.9 tons for any individual or total HAPs, respectively.
- 2.c** The overall control efficiency (capture and control) of the catalytic incinerator controlling organic compound and HAPs emissions from K007, K008, K009, K010, and P001 shall be at least 95% by weight. The control efficiency of the catalytic incinerator shall be at least 95% by weight.
- 2.d** The permittee shall install, operate and maintain a permanent total enclosure (PTE) for K007, K008, K009, K010, and P001.
- 2.e** The emission limitations for each oven established in A.1. above for PM, SO₂, CO, VOC and NO_x were established to reflect the potential to emit therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.f** The 1.7 pounds of volatile organic compound emissions per hour limit was established to reflect the potential to emit for K007. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.g** The PTE associated with these emissions units (K007, K008, K009, K010, and P001) shall demonstrate that it meets the criteria established for a PTE in method 204. The permittee shall perform an additional demonstration to show that the PTE could not be compromised under normal plant conditions, when any of the emissions units are in operation (i.e., the air flow through the PTE to the control device is always maintained under negative pressure even when all additional egress points, or non-natural draft openings, which could effect the PTE are opened). At that time, the permittee will not be required to perform any additional monitoring, record keeping, and reporting to ensure the ongoing integrity of the PTE.

B. Operational Restrictions

1. The catalytic incinerator associated with emissions units K007, K008, K009, K010, and P001 shall be operating while any of the listed emissions units are operating.

2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when K007, K008, K009, K010, or P001 are in operation, shall not be less than 600°F or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the minimum pressure differential (inches of water) established during the most recent emissions test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed is less than 600°F or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed is less than 80 percent of-

the average temperature difference during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

2. The permittee shall collect and record the following facility-wide information for each month for the purpose of determining annual emissions of VOCs, and individual and total HAPs:
 - a. The name and identification number of each coating and solvent employed.
 - b. The VOC content of each coating and solvent employed, in weight percent.
 - c. The number of pounds of each coating and solvent employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of pounds of each cleanup material employed.
 - f. The VOC content of each cleanup material, in weight percent.
 - g. The total uncontrolled facility-wide VOC emissions from all coatings, solvents and cleanup materials employed in pounds per month.
 - h. The total uncontrolled VOC emissions from all coatings, solvents and cleanup materials employed, in pounds per month from P001 (i.e. multiply the maximum amount of coating and cleanup material used in a month (lbs/month) with the AP-42 emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per month).
 - i. The calculated, controlled VOC emissions rate for all coatings, solvents and cleanup materials, in tons per calendar month. The controlled VOC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
 - j. The individual HAP and total combined HAPs content of each coating, solvent and cleanup materials employed.
 - k. The calculated, controlled emission rate of each individual HAP and total HAPs from all coatings, solvents and cleanup materials employed.
3. The permittee shall record the calculated annual HAP (individual and total) and VOC emissions

from coating/solvent usage for all emissions units at the facility, in tons per year.

4. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).
 - b. A log or record of downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
5. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and
 - c. where computer modeling is preformed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from K007, K008, K009, K010, and P001, and the total individual and total HAP emissions for all emissions units at the facility for the previous calendar year in tons per year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of annual limitation for VOCs and individual and total HAPs.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the

permittee shall submit pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

The permittee shall submit quarterly summaries of the following records:

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).

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- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference of the bed during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the catalytic incinerator was not operated while any of the emissions units covered by this permit (K007, K008, K009, K010, and P001) was in operation.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for K007, K008, K009, K010, and P001 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days of completion of installation.
 - b. The emission testing shall be conducted to demonstrate compliance with the 95%, by weight, overall control efficiency (capture and control) and the 95%, by weight, catalytic incinerator control efficiency requirements specified in Section A.I.
 - c. The following test method(s) shall be employed to determine the overall control efficiency of the control equipment serving K007, K008, K009, K010, and P001: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.

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

Emissions Unit ID: **K007**

may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 OAC rule 3745-21-10. 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.

- d. The test(s) shall be conducted while K007, K008, K009, K010, and P001 are venting emissions to the catalytic incinerator. K007, K008, K009, K010, and P001 shall be operated at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

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

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

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

- a. Emission Limitation-

Organic compound emissions shall not exceed 1.7 pounds per hour.

Applicable Compliance Method-

Compliance with the lb/hr emission limitation shall be determined according to the following equation:

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$$E = (I \times V1/100 + S \times V2/100) \times (1 - C.E.)$$

Where

E = uncontrolled volatile organic compound emissions in lbs/hr

I = maximum quantity of ink used in K007 in one hour (11.1 lbs/hr *)

V1 = volatile organic content of the ink in weight percent (71.76%*)

S = solvent used in K007 in one hour (26.9 lbs/hr *)

V2 = volatile organic content of the solvent in weight percent (100.0%*)

C.E. = overall control (capture and control) efficiency of the catalytic incinerator as measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

* These values are based on application worse case coatings.

U.S. EPA Method 24 or 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating and cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the manufacturer of the coatings and cleanup materials.

a. Emissions Limitation-

A collective limit of 38.0 tons Organic Compounds per year for emissions units K007, K008, K009, K010, and P001.

Applicable Compliance Method-

Compliance with the ton per year emission limitation shall be demonstrated through the records required pursuant to Section C and the control efficiency compliance demonstration specified in Section E.

b. Emission Limitation-

The NO_x emissions from each oven shall not exceed 0.04 pound per hour and 0.17 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (381 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) to get nitrogen oxides emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (3.33 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) and divide by 2000 lbs/ton to get nitrogen oxides emissions in

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tons/year.

c. Emission Limitation-

The CO emissions from each oven shall not exceed 0.032 pound per hour and 0.14 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (381 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) to get carbon monoxide emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (3.33 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) and divide by 2000 lbs/ton to get CO emissions in tons/year.

d. Emission Limitation-

The SO₂ emissions from each oven shall not exceed 0.00023 pound per hour and 0.001 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (381 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) to get SO₂ emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (3.33 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) and divide by 2000 lbs/ton to get SO₂ emissions in tons/year.

e. Emission Limitation-

The VOC emissions from each oven shall not exceed 0.002 pound per hour and 0.01 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (381 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) to get VOC emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (3.33 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) and divide by 2000 lbs/ton to get VOC emissions in tons/year.

f. Emission Limitation-

The particulate matter emissions from each oven shall not exceed 0.007 pound per hour and 0.003 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (381 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) to get particulate matter emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (3.33 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) and divide by 2000 lbs/ton to get particulate matter emissions in tons/year.

g. Emission Limitation-

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year

Applicable Compliance Method:

Compliance with the lb/hr limitation will be determined according to the following equation:

$$E = F(\text{ft}^3/\text{min}) \times V(\text{mole}/\text{ft}^3) \times R(\text{ppm}) \times 46 \text{ g of NO}_x/\text{mole} \times 60 \text{ min}/\text{hr} \times (T1/T2)$$

Where

F = Stack flow rate (20,000 ft³/min)

E = NO_x emissions in lbs/hr

V = The volume of gas occupied by 1 mole of gas at 20°C and 1 atmosphere pressure (mole/385 ft³)

R = Emission rate supplied by the manufacturer (25 ppm or 25/1,000,000)

T1 = 293°K (U.S.EPA standard temperature)

T2 = 321°K (stack gas temperature of 120°F)

Columbus Cello-Poly

PTI Application: 01 0024

Date:

Facility ID: 0125041958

Emissions Unit ID: **K007**

Compliance with the ton/yr limit shall be determined by multiplying the NO_x emissions obtained in lbs/hr from the equation above with 8,760 hrs per year and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

h. Emission Limitation-

The overall control efficiency (capture and control) shall be at least 95%, by weight. The control efficiency of the catalytic incinerator shall be at least 95%, by weight.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum capture efficiency and minimum control efficiency requirements of Section A.I.1 in accordance with the requirements listed in Section E.1

i. Emission Limitation-

The annual, individual and total hazardous air pollutant (HAP) emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to Section C.

j. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes

the results of the modeling for each pollutant:

Pollutant: n-Propyl acetate

TLV (ug/m³): 835,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

MAGLC (ug/m³): 19,880

Pollutant: n-Butyl acetate

TLV (ug/m³): 713,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

MAGLC (ug/m³): 16,796

Pollutant: n-Propanol

TLV (ug/m³): 492,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

MAGLC (ug/m³): 11,714

Pollutant: Ethanol

TLV (ug/m³): 1,880,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

Columbus Cello-Poly

PTI Application: 01 0024

Date:

Facility ID: 0125041958

Emissions Unit ID: K007

MAGLC (ug/m3): 44,762

Pollutant: Isopropyl alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 23,404

* The 8.6 lbs/hr emission rate is the sum of allowable lb/hr emissions from K007, K008, K009, K010, and P001.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

2. This Permit to Install (01-8034) supercedes Permit to Install 01-7861 issued on May 28, 1999.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

following the table.

Operations, Property,
and/or Equipment

6 color flexographic press with two

natural gas fired (indirect fired) drying ovens with a single burner rated at 1.0

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

MMBtu per hour.

Applicable Rules/Requirements

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

OAC rule 3745-31-05

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

OAC Rule 3745-21-09(Y)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

OAC Rule 3745-17-07(A(1)(a))

Applicable Emissions Limitations/Control Measures

The volatile organic compound (VOC) emissions from K008 shall not exceed 1.3 pounds per hour.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Facility-wide HAP limit, see A.2.b.

The nitrogen oxides emissions (NO_x) emissions from each oven shall not exceed 0.095 pound per hour and 0.42

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

ton per year.

The carbon monoxide emissions (CO) emissions from each oven shall not exceed 0.08 pound per hour and 0.35 ton per year.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The sulfur dioxide emissions (SO₂) emissions from each oven shall not exceed 0.00057 pound per hour and 0.002 ton per year.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The volatile organic compound emissions (VOC) emissions from each oven shall not exceed 0.0052 pound per hour and 0.023 ton per year.

The particulate matter emissions (PM) emissions from each oven shall not exceed 0.002 pound per hour and

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

0.008 ton per year.

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

2. Additional Terms and Conditions

2.a The combined volatile organic compound (VOC) emissions from K007, K008, K009, K010, and P001 shall not exceed 38.0 tons per year.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.b The maximum annual combined emissions limitation from this facility shall not exceed 9.9 tons and 24.9 tons for any individual or total HAPs, respectively.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.c The overall control efficiency (capture and control) of the catalytic incinerator controlling organic compound and HAPs emissions from K007, K008, K009, K010, and P001 shall be at least 95% by weight. The control efficiency of the catalytic incinerator shall be at least 95% by weight.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.d The permittee shall install, operate and maintain a permanent total enclosure (PTE) for K007, K008, K009, K010, and P001.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.e The emission limitations for each oven established in A.1. above for PM, SO₂, CO, VOC and NO_x were established to reflect the potential to emit therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.f The 1.3 pounds of volatile organic compound emissions per hour limit was established to reflect the potential to emit for K008. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2.g The PTE associated with these emissions units (K007, K008, K009, K010, and P001) shall demonstrate that it meets the criteria established for a PTE in method 204. The permittee shall perform an additional demonstration to show that the PTE could not be

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

compromised under normal plant conditions, when any of the emissions units are in operation (i.e., the air flow through the PTE to the control device is always maintained under negative pressure even when all additional egress points, or non-natural draft openings, which could effect the PTE are opened). At that time, the permittee will not be

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

required to perform any additional monitoring, record keeping, and reporting to ensure the ongoing integrity of the PTE.

B. Operational Restrictions

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 1. The catalytic incinerator associated with emissions units K007, K008, K009, K010, and P001 shall be operating while any of the listed emissions units are operating.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when K007, K008, K009, K010, or P001 are in operation, shall not be less than 600°F or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance. The

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

differential that is not less than the minimum pressure differential (inches of water) established during the most recent emissions test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Record keeping Requirements

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

during which the average temperature of the exhaust gases immediately before the catalyst bed is less than 600°F or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 2. The permittee shall collect and record the following facility-wide information for each month for the purpose of determining annual emissions of VOCs, and individual and total HAPs:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- a. The name and identification number of each coating and solvent employed.
- b. The VOC content of each coating and solvent employed, in weight percent.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- c. The number of pounds of each coating and solvent employed.
- d. The name and identification of each cleanup material employed.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- e. The number of pounds of each cleanup material employed.
- f. The VOC content of each cleanup material, in weight percent.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

g. The total uncontrolled facility-wide VOC emissions from all coatings, solvents and cleanup materials employed in pounds per month.

h. The total uncontrolled VOC emissions from all coatings, solvents and cleanup materials

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

employed, in pounds per month from P001 (i.e. multiply the maximum amount of coating and cleanup material used in a month (lbs/month) with the AP-42 emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per month).

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- i. The calculated, controlled VOC emissions rate for all coatings, solvents and cleanup materials, in tons per calendar month. The controlled VOC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

- j. The individual HAP and total combined HAPs content of each coating, solvent and

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

cleanup materials employed.

- k. The calculated, controlled emission rate of each individual HAP and total HAPs from all coatings, solvents and cleanup materials employed.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 3. The permittee shall record the calculated annual HAP (individual and total) and VOC emissions from coating/solvent usage for all emissions units at the facility, in tons per year.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 4. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- b. A log or record of downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

- 5. The permittee shall collect and record the following information for each change where the air

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

toxic modeling was required pursuant to the Air Toxic Policy:

- a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

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

D. Reporting Requirements

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 1. The permittee shall submit annual reports which specify the total VOC emissions from K007, K008, K009, K010, and P001, and the total individual and total HAP emissions for all emissions units at the facility for the previous calendar year in tons per year. These reports shall be

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

submitted by January 31 of each year.

- 2. The permittee shall submit deviation (excursion) reports which identify all exceedances of annual limitation for VOCs and individual and total HAPs.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall submit pressure differential deviation (excursion) reports that identify all periods of

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

The permittee shall submit quarterly summaries of the following records:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference of the bed during the most recent

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

shall cover the records for the previous calendar quarters.

- 5. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the catalytic incinerator was not operated while any of the emissions units covered by this permit

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

(K007, K008, K009, K010, and P001) was in operation.

E. Testing Requirements

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 1. The permittee shall conduct, or have conducted, emission testing for K007, K008, K009, K010, and P001 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days of completion of installation.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- b. The emission testing shall be conducted to demonstrate compliance with the 95%, by weight, overall control efficiency (capture and control) and the 95%, by weight, catalytic incinerator control efficiency requirements specified in Section A.I.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- c. The following test method(s) shall be employed to determine the overall control efficiency of the control equipment serving K007, K008, K009, K010, and P001: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

204.

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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

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

Column

PTI A₁

Date: November 17, 1999

Emissions Unit ID: **K008**

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

requirement.) 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 OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

concentration, and on a consideration of the potential presence of interfering gases.

- d. The test(s) shall be conducted while K007, K008, K009, K010, and P001 are venting emissions to the catalytic incinerator. K007, K008, K009, K010, and P001 shall be

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

operated at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Test" notification to the Ohio EPA, Central 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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

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

Column

PTI A₁

Date: November 17, 1999

Emissions Unit ID: **K008**

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

a. Emission Limitation-

Organic compound emissions shall not exceed 1.3 pounds per hour.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method-

Compliance with the lb/hr emission limitation shall be determined according to the following equation:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

$$E = (I \times V1/100 + S \times V2/100) \times (1-C.E.)$$

Where

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

E = uncontrolled volatile organic compound emissions in lbs/hr
 I = maximum quantity of ink used in K008 in one hour (8.5 lbs/hr*)
 V1 = volatile organic content of the ink in weight percent (71.76%*)
 S = solvent used in K008 in one hour (20.5 lbs/hr*)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

V2 = volatile organic content of the solvent in weight percent (100.0%*)

C.E. = overall control (capture and control) efficiency of the catalytic incinerator as measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

* These values are based on application worse case coatings.

U.S. EPA Method 24 or 24A shall be used to determine the VOC contents for coatings

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating and cleanup

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the manufacturer of the coatings and cleanup materials.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

b. Emission Limitation-

The NO_x emissions from each oven shall not exceed 0.095 pound per hour and 0.42 ton per year

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural

Column

PTI A₁

Date: November 17, 1999

Emissions Unit ID: **K008****PART II: SPECIAL TERMS AND CONDITIONS [Continued]****A. Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

gas consumption (952 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) to get nitrogen oxides emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

gas consumption (8.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

c. Emission Limitation-

The CO emissions from each oven shall not exceed 0.08 pound per hour and 0.35 ton per year

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

gas consumption (952 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) to get carbon monoxide emissions in lbs/hr.

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (8.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) and divide by 2000 lbs/ton to get CO emissions in tons/year.

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

d. Emission Limitation-

The SO₂ emissions from each oven shall not exceed 0.00057 pound per hour and 0.002 ton per year

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

gas consumption (952 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) to get SO₂ emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

gas consumption (8.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) and divide by 2000 lbs/ton to get SO₂ emissions in tons/year.

e. Emission Limitation-

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The VOC emissions from each oven shall not exceed 0.0052 pound per hour and 0.023 ton per year

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (952 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

(5.5 lbs/MMft³) to get VOC emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (8.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

factor (5.5 lbs/MMft³) and divide by 2000 lbs/ton to get VOC emissions in tons/year.

f. Emission Limitation-

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The particulate matter emissions from each oven shall not exceed 0.002 pound per hour and 0.008 ton per year

Applicable Compliance Method:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (952 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) to get particulate matter emissions in lbs/hr.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (8.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) and divide by 2000 lbs/ton to get particulate matter emissions in

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

tons/year.

g. Emission Limitation-

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year

Applicable Compliance Method:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Compliance with the lb/hr limitation will be determined according to the following equation:

$$E = F(\text{ft}^3/\text{min}) \times V(\text{mole}/\text{ft}^3) \times R(\text{ppm}) \times 46 \text{ g of NO}_x/\text{mole} \times 60 \text{ min}/\text{hr} \times (T1/T2)$$

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Where

F = Stack flow rate (20,000 ft³/min)

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

E = NO_x emissions in lbs/hr

V = The volume of gas occupied by 1 mole of gas at 20°C and 1 atmosphere pressure (mole/385 ft³)

R = Emission rate supplied by the manufacturer (25 ppm or 25/1,000,000)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

T1 = 293°K (U.S.EPA standard temperature)

T2 = 321°K (stack gas temperature of 120°F)

Compliance with the ton/yr limit shall be determined by multiplying the NO_x emissions

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

obtained in lbs/hr from the equation above with 8,760 hrs per year and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

h. Emission Limitation-

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The overall control efficiency (capture and control) shall be at least 95%, by weight. The control efficiency of the catalytic incinerator shall be at least 95%, by weight.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum capture efficiency and minimum control

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

efficiency requirements of Section A.I.1 in accordance with the requirements listed in Section E.1

i. Emission Limitation-

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The annual, individual and total hazardous air pollutant (HAP) emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to Section C.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

j. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

as provided by rule.

Applicable Compliance Method:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

F. Miscellaneous Requirements

- 1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Pollutant: n-Propyl acetate

TLV (ug/m3): 835,000

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

MAGLC (ug/m³): 19,880

Pollutant: n-Butyl acetate

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

TLV (ug/m³): 713,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 16,796

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Pollutant: n-Propanol

TLV (ug/m3): 492,000

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

MAGLC (ug/m³): 11,714

Pollutant: Ethanol

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

TLV (ug/m³): 1,880,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3):1,173

MAGLC (ug/m3): 44,762

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Pollutant: Isopropyl alcohol

TLV (ug/m3): 983,000

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

MAGLC (ug/m³): 23,404

* The 8.6 lbs/hr emission rate is the sum of allowable lb/hr emissions from K007, K008,

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

K009, K010, and P001.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

hereby advised that the following changes to the process may be determined to be a "modification":

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- 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

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

(ACGIH)," than the lowest TLV value specified in the above table;

- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

Date: November 17, 1999

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Description

Applicable Rules/Requirements

OAC rule 3745-31-05

Applicable Emissions Limitations/Control Measures

Limit

2. Additional Terms and Conditions

2.a SELECT

B. Operational Restrictions

SELECT

C. Monitoring and/or Record keeping Requirements

SELECT

install prior to the change.

- 2. This Permit to Install (01-8034) supercedes Permit to Install 01-7861 issued on May 28, 1999.

Column

PTI A₁

Date: November 17, 1999

Emissions Unit ID: **K009**

<u>Applicable Emissions Limitations/Control Measures</u>	
The volatile organic compound (VOC) emissions from K009 shall not exceed 3.7 pounds per hour.	exceed 3.27 pounds per hour and 14.3 tons per year.
Facility-wide HAP limit, see A.2.b.	The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.
The nitrogen oxides emissions (NO _x) emissions from each oven shall not exceed 0.08 pound per hour and 0.33 ton per year.	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
The carbon monoxide emissions (CO) emissions from each oven shall not exceed 0.06 pound per hour and 0.28 ton per year.	
The sulfur dioxide emissions (SO ₂) emissions from each oven shall not exceed 0.00046 pound per hour and 0.002 ton per year.	
The volatile organic compound emissions (VOC) emissions from each oven shall not exceed 0.004 pound per hour and 0.02 ton per year.	
The particulate matter emissions (PM) emissions from each oven shall not exceed 0.0014 pound per hour and 0.006 ton per year.	
The NO _x emissions from the catalytic incinerator shall not	

2. Additional Terms and Conditions

- 2.a The combined volatile organic compound (VOC) emissions from K007, K008, K009, K010, and P001 shall not exceed 38.0 tons per year.
- 2.b The maximum annual combined emissions limitation from this facility shall not exceed 9.9 tons and 24.9 tons for any individual or total HAPs, respectively.
- 2.c The overall control efficiency (capture and control) of the catalytic incinerator controlling organic compound and HAPs emissions from K007, K008, K009, K010, and P001 shall be at least 95% by weight. The control efficiency of the catalytic incinerator shall be at least 95% by weight.
- 2.d The permittee shall install, operate and maintain a permanent total enclosure (PTE) for K007, K008, K009, K010, and P001.
- 2.e The emission limitations for each oven established in A.1. above for PM, SO₂, CO, VOC and NO_x were established to reflect the potential to emit therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.f The 3.7 pounds of volatile organic compound emissions per hour limit was established to reflect the potential to emit for K009. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.g The PTE associated with these emissions units (K007, K008, K009, K010 and P001) shall demonstrate that it meets the criteria established for a PTE in method 204. The permittee shall perform an additional demonstration to show that the PTE could not be compromised under normal plant conditions, when any of the emissions units are in operation (i.e., the air flow through the PTE to the control device is always maintained under negative pressure

even when all additional egress points, or non-natural draft openings, which could effect the PTE are opened). At that time, the permittee will not be required to perform any additional monitoring, record keeping, and reporting to ensure the ongoing integrity of the PTE.

B. Operational Restrictions

1. The catalytic incinerator associated with emissions units K007, K008, K009, K010, and P001 shall be operating while any of the listed emissions units are operating.
2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when K007, K008, K009, K010 or P001 are in operation, shall not be less than 600°F or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the minimum pressure differential (inches of water) established during the most recent emissions test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).

- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed is less than 600°F or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
 - c. All 3-hour blocks of time (when K007, K008, K009, K010 or P001 are in operation) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
2. The permittee shall collect and record the following facility-wide information for each month for the purpose of determining annual emissions of VOCs, and individual and total HAPs:
- a. The name and identification number of each coating and solvent employed.
 - b. The VOC content of each coating, and solvent employed, in weight percent.
 - c. The number of pounds of each coating and solvent employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of pounds of each cleanup material employed.
 - f. The VOC content of each cleanup material, in weight percent.
 - g. The total uncontrolled facility-wide VOC emissions from all coatings, solvents and cleanup materials employed in pounds per month.
 - h. The total uncontrolled VOC emissions from all coatings, solvents and cleanup materials employed, in pounds per month from P001 (i.e. multiply the maximum amount of coating and cleanup material used in a month (lbs/month) with the AP-42 emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per month).
 - i. The calculated, controlled VOC emissions rate for all coatings, solvents and cleanup materials, in tons per calendar month. The controlled VOC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

- j. The individual HAP and total combined HAPs content of each coating, solvent and cleanup materials employed.
 - k. The calculated, controlled emission rate of each individual HAP and total HAPs from all coatings, solvents and cleanup materials employed.
3. The permittee shall record the calculated annual HAP (individual and total) and VOC emissions from coating/solvent usage for all emissions units at the facility, in tons per year.

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4. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).
 - b. A log or record of downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
5. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and
 - c. where computer modeling is preformed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from K007, K008, K009, K010, and P001, and the total individual and total HAP emissions for all emissions units at the facility for the previous calendar year in tons per year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of annual limitation for VOCs and individual and total HAPs.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall submit pressure differential deviation (excursion) reports that identify all periods of

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time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

The permittee shall submit quarterly summaries of the following records:

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- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010 or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference of the bed during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the catalytic incinerator was not operated while any of the emissions units covered by this permit (K007, K008, K009, K010, and P001) was in operation.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for K007, K008, K009, K010, and P001 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days of completion of installation.
 - b. The emission testing shall be conducted to demonstrate compliance with the 95%, by weight, overall control efficiency (capture and control) and the 95%, by weight, catalytic incinerator control efficiency requirements specified in Section A.I.
 - c. The following test method(s) shall be employed to determine the overall control efficiency of the control equipment serving K007, K008, K009, K010, and P001: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.

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.) 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 OAC rule 3745-21-10. 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.

- d. The test(s) shall be conducted while K007, K008, K009, K010, and P001 are venting emissions to the catalytic incinerator. K007, K008, K009, K010, and P001 shall be operated at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

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

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

2. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-

Organic compound emissions shall not exceed 3.7 pounds per hour.

Applicable Compliance Method-

Compliance with the lb/hr emission limitation shall be determined according to the following equation:

$$E = (I \times V1/100 + S \times V2/100) \times (1 - C.E.)$$

Where

E = uncontrolled volatile organic compound emissions in lbs/hr

I = maximum quantity of ink used in K009 in one hour (23.4 lbs/hr*)

V1 = volatile organic content of the ink in weight percent (71.76%*)

S = solvent used in K009 in one hour (56.6 lbs/hr*)

V2 = volatile organic content of the solvent in weight percent (100.0%*)

C.E. = overall control (capture and control) efficiency of the catalytic incinerator as measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

* These values are based on application worst case coatings.

U.S. EPA Method 24 or 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating and cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the manufacturer of the coatings and cleanup materials.

b. Emission Limitation-

The NO_x emissions from each oven shall not exceed 0.08 pound per hour and 0.33 ton per year.

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (762 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) to get nitrogen oxides emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (6.67 MMft³/yr) with the AP-42 (revised as of March, 1998) emission

factor (100 lbs/MMft³) and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

c. Emission Limitation-

The CO emissions from each oven shall not exceed 0.064 pound per hour and 0.28 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (762 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) to get carbon monoxide emissions in lbs/hr.

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Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (6.67 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) and divide by 2000 lbs/ton to get CO emissions in tons/year.

d. Emission Limitation-

The SO₂ emissions from each oven shall not exceed 0.00046 pound per hour and 0.002 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (762 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) to get SO₂ emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (6.67 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) and divide by 2000 lbs/ton to get SO₂ emissions in tons/year.

e. Emission Limitation-

The VOC emissions from each oven shall not exceed 0.004 pound per hour and 0.037 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (762 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) to get VOC emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (6.67 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) and divide by 2000 lbs/ton to get VOC emissions in tons/year.

f. Emission Limitation-

The particulate matter emissions from each oven shall not exceed 0.0014 pound per hour and 0.006 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (762 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) to get particulate matter emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (6.67 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) and divide by 2000 lbs/ton to get particulate matter emissions in tons/year.

g. Emission Limitation-

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year

Applicable Compliance Method:

Compliance with the lb/hr limitation will be determined according to the following equation:

$$E = F(\text{ft}^3/\text{min}) \times V(\text{mole}/\text{ft}^3) \times R (\text{ppm}) \times 46 \text{ g of NO}_x/\text{mole} \times 60 \text{ min}/\text{hr} \times (T_1/T_2)$$

Where

F = Stack flow rate (16,000 ft³/min)

E = NO_x emissions in lbs/hr

V = The volume of gas occupied by 1 mole of gas at 20°C and 1 atmosphere pressure (mole/385 ft³)

R = Emission rate supplied by the manufacturer (25 ppm or 25/1,000,000)

T₁ = 293°K (U.S.EPA standard temperature)

T₂ = 321°K (stack gas temperature of 120°F)

Compliance with the ton/yr limit shall be determined by multiplying the NO_x emissions obtained in lbs/hr from the equation above with 8,760 hrs per year and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

h. Emission Limitation-

The overall control efficiency (capture and control) shall be at least 95%, by weight. The control efficiency of the catalytic incinerator shall be at least 95%, by weight.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum capture efficiency and minimum control efficiency requirements of Section A.I.1 in accordance with the requirements listed in Section E.1

i. Emission Limitation-

The annual, individual and total hazardous air pollutant (HAP) emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to Section C.

j. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

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Pollutant: n-Propyl acetate

TLV (ug/m3): 835,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 19,880

Pollutant: n-Butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 16,796

Pollutant: n-Propanol

TLV (ug/m3): 492,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 11,714

Pollutant: Ethanol

TLV (ug/m3): 1,880,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 44,762

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Pollutant: Isopropyl alcohol

TLV (ug/m³): 983,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173MAGLC (ug/m³): 23,404

* The 8.6 lbs/hr emission rate is the sum of allowable lb/hr emissions from K007, K008, K009, K010, and P001.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

2. This Permit to Install (01-8034) supercedes Permit to Install 01-7861 issued on May 28, 1999.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coating mixing room	OAC rule 3745-31-05	The volatile organic compound (VOC) emissions from P001 shall not exceed 0.1 pound per hour.
	OAC rule 3745-21-07(G)(2)	Facility-wide HAP limit, see A.2.b. The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

2. Additional Terms and Conditions

- 2.a The combined volatile organic compound (VOC) emissions from K007, K008, K009, K010, and P001 shall not exceed 38.0 tons per year.
- 2.b The maximum annual combined emissions limitation from this facility shall not exceed 9.9 tons and 24.9 tons for any individual or total HAPs, respectively.
- 2.c The overall control efficiency (capture and control) of the catalytic incinerator controlling organic compound and HAPs emissions from K007, K008, K009, K010, and P001 shall be at least 95% by weight. The control efficiency of the catalytic incinerator shall be at least 95% by weight.
- 2.d The permittee shall install, operate and maintain a permanent total enclosure (PTE) for K007, K008, K009, K010, and P001.
- 2.e The PTE associated with these emissions units (K007, K008, K009, K010, and P001)

shall demonstrate that it meets the criteria established for a PTE in method 204. The permittee shall perform an additional demonstration to show that the PTE could not be compromised under normal plant conditions, when any of the emissions units are in operation (i.e., the air flow through the PTE to the control device is always maintained under negative pressure even when all additional egress points, or non-natural draft openings, which could effect the PTE are opened). At that time, the permittee will not be required to perform any additional monitoring, record keeping, and reporting to ensure the ongoing integrity of the PTE.

- 2.f** The 0.1 pound of volatile organic compound emissions per hour limit was established to reflect the potential to emit for P001. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

1. The catalytic incinerator associated with emissions units K007, K008, K009, K010, and P001 shall be operating while any of the listed emissions units are operating.
2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when K007, K008, K009, K010 or P001 are in operation, shall not be less than 600°F or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the minimum pressure differential (inches of water) established during the most recent emissions test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained

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in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).

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- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed is less than 600°F or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
 - c. All 3-hour blocks of time (when K007, K008, K009, K010 or P001 are in operation) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
2. The permittee shall collect and record the following facility-wide information for each month for the purpose of determining annual emissions of VOCs and individual and combined HAPs:
- a. The name and identification number of each coating and solvent employed.
 - b. The VOC content of each coating and solvent employed, in weight percent.
 - c. The number of pounds of each coating and solvent employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of pounds of each cleanup material employed.
 - f. The VOC content of each cleanup material, in weight percent.
 - g. The total uncontrolled facility-wide VOC emissions rate for from all coatings, solvents and cleanup materials employed in pounds per month.
 - h. The total uncontrolled VOC emissions from all coatings, solvents and cleanup materials employed, in pounds per month from P001 (i.e. multiply the maximum amount of coating and cleanup material used in a month (lbs/month) with the AP-42 emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per month).
 - i. The calculated, controlled VOC emissions rate for all coatings, solvents and cleanup materials, in tons per calender month. The controlled VOC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

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- j. The individual HAP and total combined HAPs content of each coating, solvent and cleanup materials employed.

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- k. The calculated, controlled emission rate of each individual HAP and total HAPs from all coatings, solvents and cleanup materials employed.
3. The permittee shall record the calculated annual HAP (individual and total) and VOC emissions from coating/solvent usage for all emissions units at the facility, in tons per year.
4. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).
 - b. A log or record of downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
5. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and
 - c. where computer modeling is preformed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from K007, K008, K009, K010, and P001, and the total individual and combined HAPs emissions for all emissions units at the facility for the previous calendar year in tons per year. These reports shall be submitted by January 31 of each year.

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2. The permittee shall submit deviation (excursion) reports which identify all exceedances of annual limitation for VOCs and individual and total HAPs.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall submit pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

The permittee shall submit quarterly summaries of the following records:

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010 or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference of the bed during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the catalytic incinerator was not operated while any of the emissions units covered by this permit (K007, K008, K009, K010, and P001) was in operation.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for K007, K008, K009, K010, and P001 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days of completion of installation.
 - b. The emission testing shall be conducted to demonstrate compliance with the 95%, by

weight, overall control efficiency (capture and control) and the 95%, by weight, catalytic incinerator control efficiency requirements specified in Section A.I.

- c. The following test method(s) shall be employed to determine the overall control efficiency of the control equipment serving K007, K008, K009, K010, and P001: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.

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.) 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 OAC rule 3745-21-10. 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.

- d. The test(s) shall be conducted while K007, K008, K009, K010, and P001 are venting emissions to the catalytic incinerator. K007, K008, K009, and K010 shall be operated at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for

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the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

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

- a. Emission Limitation-

Organic compound emissions shall not exceed 0.1 pound per hour.

Applicable Compliance Method-

Compliance with the lb/hr limitation will be determined by multiplying the maximum amount of coating and cleanup material used in an hour (147 lbs/hour*) with the AP-42(section 6.4 issued 5/83)emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per hour. The controlled organic compound emissions (lbs/hr) shall be obtained by the following equation:

$$E = U \times (1 - C.E.)$$

Where

E = controlled organic compound emissions (lbs/hr)

U = uncontrolled organic compound emissions (2.2 lbs/hr*)

C.E. = overall control (capture and control) efficiency of the catalytic incinerator as measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

- * These values are based on application worse case coatings.

U.S. EPA Method 24 or 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating and cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the manufacturer of the coatings and cleanup materials.

- b. Emissions Limitation-

A collective limit of 38.0 tons Organic Compounds per year for emissions units K007, K008, K009, K010, and P001.

Applicable Compliance Method-

Compliance with the ton per year emission limitation shall be demonstrated through the records required pursuant to Section C and the control efficiency compliance demonstration specified in Section E.

- c. Emission Limitation-

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The annual, individual and total hazardous air pollutant (HAP) emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively.

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to Section C.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: n-Propyl acetate

TLV (ug/m³): 835,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

MAGLC (ug/m³): 19,880

Pollutant: n-Butyl acetate

TLV (ug/m³): 713,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,173

MAGLC (ug/m³): 16,796

Pollutant: n-Propanol

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Emissions Unit ID: P001

TLV (ug/m3): 492,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 11,714

Pollutant: Ethanol

TLV (ug/m3): 1,880,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 44,762

Pollutant: Isopropyl alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 23,404

* The 8.6 lbs/hr emission rate is the sum of allowable lb/hr emissions from K007, K008, K009, K010, and P001.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;

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- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

2. This Permit to Install (01-8034) supercedes Permit to Install 01-7861 issued on May 28, 1999.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
8 color flexographic press with two 1.1 MMBtu per hour natural gas fired (indirect fired) drying ovens.	OAC rule 3745-31-05
	OAC Rule 3745-21-09(Y)
	OAC Rule 3745-17-07(A(1)(a))
	OAC Rule 3745-17-11(B)(1)

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Applicable Emissions
Limitations/Control Measures

The volatile organic compound (VOC) emissions from K010 shall not exceed 1.8 pounds per hour.

Facility-wide HAP limit, see A.2.b.

The nitrogen oxides emissions (NO_x) emissions from each oven shall not exceed 0.1 pound per hour and 0.47 ton per year.

The carbon monoxide emissions (CO) emissions from each oven shall not exceed 0.09 pound per hour and 0.39 ton per year.

The sulfur dioxide emissions (SO₂) emissions from each oven shall not exceed 0.0006 pound per hour and 0.003 ton per year.

The volatile organic compound emissions (VOC) emissions from each oven shall not exceed 0.006 pound per hour and 0.03 ton per year.

The particulate matter emissions (PM) emissions from each oven shall not exceed 0.002 pound per hour and 0.01 ton per year.

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year.

The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

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

The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.
more stringent than the emission limitations established by this rule.

2. Additional Terms and Conditions

- 2.a** The combined volatile organic compound (VOC) emissions from K007, K008, K009, K010, and P001 shall not exceed 38.0 tons per year.
- 2.b** The maximum annual combined emissions limitation from this facility shall not exceed 9.9 tons and 24.9 tons for any individual or total HAPs, respectively.
- 2.c** The overall control efficiency (capture and control) of the catalytic incinerator controlling organic compound and HAPs emissions from K007, K008, K009, K010, and P001 shall be at least 95% by weight. The control efficiency of the catalytic incinerator shall be at least 95% by weight.
- 2.d** The permittee shall install, operate and maintain a permanent total enclosure (PTE) for K007, K008, K009, K010, and P001.
- 2.e** The emission limitations for each oven established in A.1. above for PM, SO₂, CO, VOC and NO_x were established to reflect the potential to emit therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.f** The 1.8 pounds of volatile organic compound emissions per hour limit was established to reflect the potential to emit for K010. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

- 2.g** The PTE associated with these emissions units (K007, K008, K009, K010, and P001) shall demonstrate that it meets the criteria established for a PTE in method 204. The permittee shall perform an additional demonstration to show that the PTE could not be compromised under normal plant conditions, when any of the emissions units are in operation (i.e., the air flow through the PTE to the control device is always maintained under negative pressure even when all additional egress points, or non-natural draft openings, which could effect the PTE are opened). At that time, the permittee will not be required to perform any additional monitoring, record keeping, and reporting to ensure the ongoing integrity of the PTE.

B. Operational Restrictions

1. The catalytic incinerator associated with emissions units K007, K008, K009, K010, and P001 shall be operating while any of the listed emissions units are operating.
2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when K007, K008, K009, K010, or P001 are in operation, shall not be less than 600°F or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the minimum pressure differential (inches of water) established during the most recent emissions test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
 - b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed is less than 600°F or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
 - c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
2. The permittee shall collect and record the following facility-wide information for each month for the purpose of determining annual emissions of VOCs, and individual and total HAPs:
- a. The name and identification number of each coating and solvent employed.
 - b. The VOC content of each coating and solvent employed, in weight percent.
 - c. The number of pounds of each coating and solvent employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of pounds of each cleanup material employed.
 - f. The VOC content of each cleanup material, in weight percent.
 - g. The total uncontrolled facility-wide VOC emissions from all coatings, solvents and cleanup materials employed in pounds per month.
 - h. The total uncontrolled VOC emissions from all coatings, solvents and cleanup materials employed, in pounds per month from P001 (i.e. multiply the maximum amount of coating and cleanup material used in a month (lbs/month) with the AP-42 emission factor (30 lbs/ton) and divide by 2,000 lbs to obtain uncontrolled organic compound emissions in lbs per month).
 - i. The calculated, controlled VOC emissions rate for all coatings, solvents and cleanup

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materials, in tons per calendar month. The controlled VOC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

- j. The individual HAP and total combined HAPs content of each coating, solvent and cleanup materials employed.

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- k. The calculated, controlled emission rate of each individual HAP and total HAPs from all coatings, solvents and cleanup materials employed.
3. The permittee shall record the calculated annual HAP (individual and total) and VOC emissions from coating/solvent usage for all emissions units at the facility, in tons per year.
4. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).
 - b. A log or record of downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
5. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
- a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and
 - c. where computer modeling is preformed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from K007, K008, K009, K010, and P001, and the total individual and total HAP emissions for all emissions units at the facility for the previous calendar year in tons per year. These reports shall be submitted by January 31 of each year.

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2. The permittee shall submit deviation (excursion) reports which identify all exceedances of annual limitation for VOCs and individual and total HAPs.
3. If the results of the additional testing required in section (A)(2)(f) are unsuccessful in demonstrating that the PTE could not be compromised under normal plant conditions, the permittee shall submit pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

The permittee shall submit quarterly summaries of the following records:

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions units (K007, K008, K009, K010, and P001).
- b. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.
- c. All 3-hour blocks of time (when K007, K008, K009, K010, or P001 are in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference of the bed during the most recent performance test that demonstrates that K007, K008, K009, K010, and P001 are in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the catalytic incinerator was not operated while any of the emissions units covered by this permit (K007, K008, K009, K010, and P001) was in operation.

E. Testing Requirements

- a. Emission Limitation-

Organic compound emissions shall not exceed 1.8 pounds per hour.

Applicable Compliance Method-

Compliance with the lb/hr emission limitation shall be determined according to the following equation:

$$E = (I \times V1/100 + S \times V2/100) \times (1 - C.E.)$$

Where

E = uncontrolled volatile organic compound emissions in lbs/hr

I = maximum quantity of ink used in K010 in one hour (11.7 lbs/hr *)

V1 = volatile organic content of the ink in weight percent (71.76%*)

S = solvent used in K010 in one hour (28.3 lbs/hr *)

V2 = volatile organic content of the solvent in weight percent (100.0%*)

C.E. = overall control (capture and control) efficiency of the catalytic incinerator as measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

* These values are based on application worse case coatings.

U.S. EPA Method 24 or 24A shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating and cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the manufacturer of the coatings and cleanup materials.

b. Emissions Limitation-

A collective limit of 38.0 tons Organic Compounds per year for emissions units K007, K008, K009, K010 and P001.

Applicable Compliance Method-

Compliance with the ton per year emission limitation shall be demonstrated through the records required pursuant to Section C and the control efficiency compliance demonstration specified in Section E.

c. Emission Limitation-

The NO_x emissions from each oven shall not exceed 0.1 pound per hour and 0.47 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (1067 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) to get nitrogen oxides emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (9.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (100 lbs/MMft³) and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

d. Emission Limitation-

The CO emissions from each oven shall not exceed 0.09 pound per hour and 0.39 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (1067 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) to get carbon monoxide emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (9.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (84 lbs/MMft³) and divide by 2000 lbs/ton to get CO emissions in tons/year.

e. Emission Limitation-

The SO₂ emissions from each oven shall not exceed 0.0006 pound per hour and 0.003 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (1067 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) to get SO₂ emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (9.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (0.6 lbs/MMft³) and divide by 2000 lbs/ton to get SO₂ emissions in tons/year.

f. Emission Limitation-

The VOC emissions from each oven shall not exceed 0.006 pound per hour and 0.03 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (1067 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) to get VOC emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (9.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (5.5 lbs/MMft³) and divide by 2000 lbs/ton to get VOC emissions in tons/year.

g. Emission Limitation-

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The particulate matter emissions from each oven shall not exceed 0.002 pound per hour and 0.01 ton per year

Applicable Compliance Method:

Compliance with the lb/hr limit shall be determined by multiplying the maximum natural gas consumption (1067 ft³/hr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) to get particulate matter emissions in lbs/hr.

Compliance with the ton/yr limit shall be determined by multiplying the maximum natural gas consumption (9.34 MMft³/yr) with the AP-42 (revised as of March, 1998) emission factor (1.9 lbs/MMft³) and divide by 2000 lbs/ton to get particulate matter emissions in tons/year.

h. Emission Limitation-

The NO_x emissions from the catalytic incinerator shall not exceed 3.27 pounds per hour and 14.3 tons per year

Applicable Compliance Method:

Compliance with the lb/hr limitation will be determined according to the following equation:

$$E = F(\text{ft}^3/\text{min}) \times V(\text{mole}/\text{ft}^3) \times R(\text{ppm}) \times 46 \text{ g of NO}_x/\text{mole} \times 60 \text{ min}/\text{hr} \times (T1/T2)$$

Where

F = Stack flow rate (20,000 ft³/min)

E = NO_x emissions in lbs/hr

V = The volume of gas occupied by 1 mole of gas at 20°C and 1 atmosphere pressure (mole/385 ft³)

R = Emission rate supplied by the manufacturer (25 ppm or 25/1,000,000)

T1 = 293°K (U.S.EPA standard temperature)

T2 = 321°K (stack gas temperature of 120°F)

Compliance with the ton/yr limit shall be determined by multiplying the NO_x emissions obtained in lbs/hr from the equation above with 8,760 hrs per year and divide by 2000 lbs/ton to get nitrogen oxides emissions in tons/year.

i. Emission Limitation-

The overall control efficiency (capture and control) shall be at least 95%, by weight. The control efficiency of the catalytic incinerator shall be at least 95%, by weight.

Applicable Compliance Method:

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The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum capture efficiency and minimum control efficiency requirements of Section A.I.1 in accordance with the requirements listed in Section E.1

j. Emission Limitation-

The annual, individual and total hazardous air pollutant (HAP) emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to Section C.

k. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: n-Propyl acetate

TLV (ug/m³): 835,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

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Emissions Unit ID: **K010**

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 19,880

Pollutant: n-Butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 16,796

Pollutant: n-Propanol

TLV (ug/m3): 492,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 11,714

Pollutant: Ethanol

TLV (ug/m3): 1,880,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 44,762

Pollutant: Isopropyl alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 8.6*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,173

MAGLC (ug/m3): 23,404

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Column

PTI A₁

Date: November 17, 1999

Emissions Unit ID: **K010**

- * The 8.6 lbs/hr emission rate is the sum of allowable lb/hr emissions from K007, K008, K009, K010, and P001.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.