



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MAHONING COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-21429

Fac ID: 0250110920

DATE: 1/24/2006

EXAL Corporation
Tom Alcaro
One Performance Place
Youngstown, OH 44502

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

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

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/24/2006
Effective Date: 1/24/2006**

FINAL PERMIT TO INSTALL 02-21429

Application Number: 02-21429
Facility ID: 0250110920
Permit Fee: **\$600**
Name of Facility: EXAL Corporation
Person to Contact: Tom Alcaro
Address: One Performance Place
Youngstown, OH 44502

Location of proposed air contaminant source(s) [emissions unit(s)]:

**One Performance Place
Youngstown, Ohio**

Description of proposed emissions unit(s):

three aluminum container production lines.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

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

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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.

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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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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 (coatings and cleanup)	93

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Combined HAPs	18.75
Individual HAP	7.5

EXAL

PTI A

Issued: 1/24/2006

Emissions Unit ID: **K011****PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K011 - can coating line 11 with catalytic incinerator	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 4.34 lbs/hr and 19.02 TPY (from coatings and cleanup). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C). See sections A.2.a, A.2.b, A.2.c and B.1.
	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(D)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V, MACT and PSD	VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup). See sections A.2.d and B.2.

2. Additional Terms and Conditions

- 2.a** The interior body spray booth, exterior basecoat applicator, overvarnish applicator and all bake ovens shall be vented to the catalytic incinerator. Overspray from the interior body spray booth shall be captured by a fabric filter.
 - 2.b** The permittee shall maintain the catalytic incinerator for this emissions unit with an overall VOC removal efficiency that is at least 85%, by weight, and a control efficiency (i.e., destruction or removal efficiency) that is at least 90%, by weight.
 - 2.c** The hourly limitation is based upon the emissions unit's potential to emit using maximum coating usage (gal/1000 cans), maximum production rate (cans per minute) and an 85% overall control efficiency. Therefore, no hourly record keeping and deviation reporting are required to demonstrate compliance.
 - 2.d** The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.
- * The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

B. Operational Restrictions

- 1.** The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was 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 demonstrated the emissions unit was in compliance.
- 2.** The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

Emissions Unit ID: **K011**

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Max. volatile organic material use, tons/month</u>	<u>Max. HAPs material use, tons/month</u>	
		<u>Individual</u>	<u>Combined</u>
1	51.7	4.2	10.4
1-2	103.4	8.3	20.8
1-3	155.1	12.5	31.3
1-4	206.8	16.8	41.7
1-5	258.5	21.0	52.1
1-6	310.2	25.0	62.5
1-7	361.9	29.2	72.9
1-8	413.6	33.4	83.3
1-9	465.3	37.5	93.8
1-10	517.0	41.8	104.2
1-11	568.7	46.0	114.6
1-12	620.0	50.0	125.0

After the first 12 calendar months of operation, compliance with the annual volatile organic material and HAPs material usage limitations shall be based upon a rolling, 12-month summation of the volatile organic material and HAPs material usage figures.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) that 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.
2. The permittee shall collect and record the following information for each day of operation of this emissions unit:
 - a. All 3-hour blocks of time (when the emissions unit was in operation) during which

the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;

- b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each month for this emissions unit:
- a. The name and identification number of each coating and cleanup material employed;
 - b. The VOC content of each coating and cleanup material, as applied, in pounds of VOC per gallon applied (PVGC);
 - c. The number of gallons of each coating and cleanup material (which shall be equal to the amount of each fresh cleanup material required minus the amount of each cleanup material recovered for disposal, in gallons) employed (CT);
 - d. For each coating and cleanup material, the amount of volatile organic material used and uncontrolled VOC sent to the control device, in tons per month, defined as "CVOC" and calculated as follows:
$$\text{CVOC} = [(\text{CT}) * (\text{PVGC}) * (1 \text{ ton}/2000 \text{ lbs})];$$
 - e. The total amount of volatile organic material used and uncontrolled VOC sent to the control device from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated as a summation of C.3.d;
 - f. The total controlled VOC emission rate from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission

test that demonstrated that the emissions unit was in compliance); and

- g. The total annual controlled VOC emitted from this emissions unit from all coatings and cleanup materials employed, in tons per year, calculated as a summation of monthly VOC emissions in section C.3.f.
- 4.** The permittee shall maintain monthly records of the following information for all of the emissions units at the facility*:
- a. The individual HAP content of each coating and cleanup material, as applied, in pounds of HAP per gallon of coating or cleanup material applied;
 - b. The combined HAPs content of each coating and cleanup material, as applied, in pounds of HAP per gallon of coating or cleanup material applied (sum of all the individual HAP contents from section C.4.a);
 - c. The total individual HAP material usage from all coatings and cleanup materials employed, in tons per month for the facility*, calculated as a summation of C.4.a x C.3.c;
 - d. The total combined HAPs material usage from all coatings and cleanup materials employed, in tons per month for the facility*, calculated as a summation of C.4.b x C.3.c;
 - e. The total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month and tons per rolling, 12-month period (individual HAP emissions = the summation of [total number of gallons x individual HAP content x (1 - RE)]/2000, for each coating and cleanup material, where RE = overall removal efficiency from the most recent performance test that demonstrated compliance);
 - f. The total combined HAPs emissions from all coatings and cleanup materials employed, in tons per month and tons per rolling, 12-month period (total combined HAPs emissions = the summation of [total number of gallons x combined HAPs content x (1 - RE)]/2000, for each ink, coating and cleanup material, where RE = overall removal efficiency from the most recent emission test that demonstrated compliance);
 - g. The cumulative, individual HAP emissions and cumulative, combined HAPs emissions from all the coatings and cleanup materials employed, in tons, for

Emissions Unit ID: **K011**

each calendar month during the first 12 months of operation following the issuance of this permit;

- h. The rolling, 12-month summation of the volatile organic material usage figures for the facility*, calculated by summing the volatile organic material used and uncontrolled VOC sent to the control device from each emissions unit (C.3.e above), in tons; and
- i. The rolling, 12-month summation of the controlled VOC emissions for the facility*, in tons, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

- 5. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN3 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone

TLV (mg/m³): 1187.12

Maximum Hourly Emission Rate (lbs/hr): 3.25

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 170.1

MAGLC (ug/m³): 28,264.68

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

Policy" include the following:

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
7. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
8. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed did not comply with the temperature limitation specified above. (These reports do not waive the malfunction reporting requirements of OAC rule 3745-15-06.)
2. The permittee shall submit annual reports that specify the total VOC emissions, in tons, from the coatings and cleanup material for this emissions unit, and the total individual HAP emissions from the coatings and cleanup materials and the total combined HAPs emissions from the coatings and cleanup materials, in tons, for the entire facility, for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
3. The permittee shall submit quarterly deviation reports that identify all exceedances of the annual VOC emission limitation for this emissions unit.
4. The permittee shall submit quarterly deviation reports that identify the following information for the facility*:
 - a. All exceedances of the rolling, 12-month volatile organic material usage and VOC emission limitations;
 - b. All exceedances of the rolling, 12-month HAP material usage and emission limitations for combined HAPs and each individual HAP; and
 - c. During the first 12 calendar months of operation, all exceedances of the cumulative monthly VOC, individual HAP and combined HAPs material use and emissions limitations.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

E. Testing Requirements

1. The facility shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 30 days following start of full production capacity.
 - b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and the overall removal efficiency and control efficiency limitations for VOC.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods which must be employed to demonstrate compliance with the overall control efficiency limitations for VOC are specified below.
 - d. The test(s) shall be conducted under maximum production rates unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
 - e. 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.
2. Not later than 30 days prior to the proposed test date(s), this facility shall submit an

"Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission tests.

3. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.
5. Emission Limitation:
85% overall VOC removal efficiency and 90% control efficiency

Applicable Compliance Method:

Compliance shall be determined according to OAC rule 3745-21-10(C) and the emissions testing procedures required in sections E.1 through E.4 of these terms and conditions.

6. Emission Limitation:
4.34 pounds VOC per hour

Applicable Compliance Method:

Compliance shall be determined as part of emissions testing, required in section E.1 of these terms and conditions.

7. Emission Limitation:
19.02 TPY VOC

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in section C.3.g of these terms and conditions.

- 8. Emission Limitation:**
VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup).

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 9. Emission Limitation:**
The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 10. Emission Limitation:**
The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 11. USEPA Method 24 or Method 24A shall be used to determine the organic compound contents of the coatings.**

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the cleanup materials.

- 12. Formulation data shall be used to determine the HAP contents of the coatings and cleanup materials.**

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

EXAL Corporation
PTI Application: 02-21120
Issue:

Facility ID: 0250110920

Emissions Unit ID: K011

F. Miscellaneous Requirements

1. Prior to coating beverage cans (as defined in 40 CFR Part 60, Subpart WW), the permittee shall apply for and obtain an Ohio EPA permit to install.
2. Pursuant to OAC rule 3745-31-05(C), the following terms and conditions are federally enforceable: sections A, B, C, D, E and F.

EXAL

PTI A

Issued: 1/24/2006

Emissions Unit ID: **K012****PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K012 - can coating line 12 with catalytic incinerator	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 4.34 lbs/hr and 19.02 TPY (from coatings and cleanup). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C). See sections A.2.a, A.2.b, A.2.c and B.1.
	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(D)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V, MACT and PSD	VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup). See sections A.2.d and B.2.

2. Additional Terms and Conditions

- 2.a** The interior body spray booth, exterior basecoat applicator, overvarnish applicator and all bake ovens shall be vented to the catalytic incinerator. Overspray from the interior body spray booth shall be captured by a fabric filter.
 - 2.b** The permittee shall maintain the catalytic incinerator for this emissions unit with an overall VOC removal efficiency that is at least 85%, by weight, and a control efficiency (i.e., destruction or removal efficiency) that is at least 90%, by weight.
 - 2.c** The hourly limitation is based upon the emissions unit's potential to emit using maximum coating usage (gal/1000 cans), maximum production rate (cans per minute) and an 85% overall control efficiency. Therefore, no hourly record keeping and deviation reporting are required to demonstrate compliance.
 - 2.d** The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.
- * The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

B. Operational Restrictions

- 1.** The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was 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 demonstrated the emissions unit was in compliance.
- 2.** The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

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To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Max. volatile organic material use, tons/month</u>	<u>Max. HAPs material use, tons/month</u>	
		<u>Individual</u>	<u>Combined</u>
1	51.7	4.2	10.4
1-2	103.4	8.3	20.8
1-3	155.1	12.5	31.3
1-4	206.8	16.8	41.7
1-5	258.5	21.0	52.1
1-6	310.2	25.0	62.5
1-7	361.9	29.2	72.9
1-8	413.6	33.4	83.3
1-9	465.3	37.5	93.8
1-10	517.0	41.8	104.2
1-11	568.7	46.0	114.6
1-12	620.0	50.0	125.0

After the first 12 calendar months of operation, compliance with the annual volatile organic material and HAPs material usage limitations shall be based upon a rolling, 12-month summation of the volatile organic material and HAPs material usage figures.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) that 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.
2. The permittee shall collect and record the following information for each day of operation of this emissions unit:
 - a. All 3-hour blocks of time (when the emissions unit was in operation) during which

the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;

- b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each month for this emissions unit:
- a. The name and identification number of each coating and cleanup material employed;
 - b. The VOC content of each coating and cleanup material, as applied, in pounds of VOC per gallon applied (PVGC);
 - c. The number of gallons of each coating and cleanup material (which shall be equal to the amount of each fresh cleanup material required minus the amount of each cleanup material recovered for disposal, in gallons) employed (CT);
 - d. For each coating and cleanup material, the amount of volatile organic material used and uncontrolled VOC sent to the control device, in tons per month, defined as "CVOC" and calculated as follows:
$$\text{CVOC} = [(\text{CT}) * (\text{PVGC}) * (1 \text{ ton}/2000 \text{ lbs})];$$
 - e. The total amount of volatile organic material used and uncontrolled VOC sent to the control device from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated as a summation of C.3.d;
 - f. The total controlled VOC emission rate from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission

issuance of this permit;

- h. The rolling, 12-month summation of the volatile organic material usage figures for the facility*, calculated by summing the volatile organic material used and uncontrolled VOC sent to the control device from each emissions unit (C.3.e above), in tons; and
- i. The rolling, 12-month summation of the controlled VOC emissions for the facility*, in tons, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

- 5. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN3 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone

TLV (mg/m³): 1187.12

Maximum Hourly Emission Rate (lbs/hr): 3.25

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 170.1

MAGLC (ug/m³): 28,264.68

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

Policy" include the following:

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
7. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
8. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

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1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed did not comply with the temperature limitation specified above. (These reports do not waive the malfunction reporting requirements of OAC rule 3745-15-06.)
2. The permittee shall submit annual reports that specify the total VOC emissions, in tons, from the coatings and cleanup material for this emissions unit, and the total individual HAP emissions from the coatings and cleanup materials and the total combined HAPs emissions from the coatings and cleanup materials, in tons, for the entire facility, for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
3. The permittee shall submit quarterly deviation reports that identify all exceedances of the annual VOC emission limitation for this emissions unit.
4. The permittee shall submit quarterly deviation reports that identify the following information for the facility*:
 - a. All exceedances of the rolling, 12-month volatile organic material usage and VOC emission limitations;
 - b. All exceedances of the rolling, 12-month HAP material usage and emission limitations for combined HAPs and each individual HAP; and
 - c. During the first 12 calendar months of operation, all exceedances of the cumulative monthly VOC, individual HAP and combined HAPs material use and emissions limitations.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

E. Testing Requirements

1. The facility shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 30 days following start of full production capacity.
 - b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and the overall removal efficiency and control efficiency limitations for VOC.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods which must be employed to demonstrate compliance with the overall control efficiency limitations for VOC are specified below.
 - d. The test(s) shall be conducted under maximum production rates unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
 - e. 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.
2. Not later than 30 days prior to the proposed test date(s), this facility shall submit an

"Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission tests.

3. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.
5. Emission Limitation:
85% overall VOC removal efficiency and 90% control efficiency

Applicable Compliance Method:

Compliance shall be determined according to OAC rule 3745-21-10(C) and the emissions testing procedures required in sections E.1 through E.4 of these terms and conditions.

6. Emission Limitation:
4.34 pounds VOC per hour

Applicable Compliance Method:

Compliance shall be determined as part of emissions testing, required in section E.1 of these terms and conditions.

7. Emission Limitation:
19.02 TPY VOC

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in section C.3.g of these terms and conditions.

- 8. Emission Limitation:**
VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup).

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 9. Emission Limitation:**
The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 10. Emission Limitation:**
The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

- 11. USEPA Method 24 or Method 24A shall be used to determine the organic compound contents of the coatings.**

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the cleanup materials.

- 12. Formulation data shall be used to determine the HAP contents of the coatings and cleanup materials.**

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

F. Miscellaneous Requirements

1. Prior to coating beverage cans (as defined in 40 CFR Part 60, Subpart WW), the permittee shall apply for and obtain an Ohio EPA permit to install.
2. Pursuant to OAC rule 3745-31-05(C), the following terms and conditions are federally enforceable: sections A, B, C, D, E and F.

EXAL

PTI A

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Emissions Unit ID: **K013****PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K013 - can coating line 13 with catalytic incinerator	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 4.34 lbs/hr and 19.02 TPY (from coatings and cleanup). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C). See sections A.2.a, A.2.b, A.2.c and B.1.
	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(D)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V, MACT and PSD	VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup). See sections A.2.d and B.2.

2. Additional Terms and Conditions

- 2.a** The interior body spray booth, exterior basecoat applicator, overvarnish applicator and all bake ovens shall be vented to the catalytic incinerator. Overspray from the interior body spray booth shall be captured by a fabric filter.
 - 2.b** The permittee shall maintain the catalytic incinerator for this emissions unit with an overall VOC removal efficiency that is at least 85%, by weight, and a control efficiency (i.e., destruction or removal efficiency) that is at least 90%, by weight.
 - 2.c** The hourly limitation is based upon the emissions unit's potential to emit using maximum coating usage (gal/1000 cans), maximum production rate (cans per minute) and an 85% overall control efficiency. Therefore, no hourly record keeping and deviation reporting are required to demonstrate compliance.
 - 2.d** The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.
- * The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

B. Operational Restrictions

- 1.** The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was 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 demonstrated the emissions unit was in compliance.
- 2.** The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

To ensure enforceability during the first 12 calendar months of operation, the permittee

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shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Max. volatile organic material use, tons/month</u>	<u>Max. HAPs material use, tons/month</u>	
		<u>Individual</u>	<u>Combined</u>
1	51.7	4.2	10.4
1-2	103.4	8.3	20.8
1-3	155.1	12.5	31.3
1-4	206.8	16.8	41.7
1-5	258.5	21.0	52.1
1-6	310.2	25.0	62.5
1-7	361.9	29.2	72.9
1-8	413.6	33.4	83.3
1-9	465.3	37.5	93.8
1-10	517.0	41.8	104.2
1-11	568.7	46.0	114.6
1-12	620.0	50.0	125.0

After the first 12 calendar months of operation, compliance with the annual volatile organic material and HAPs material usage limitations shall be based upon a rolling, 12-month summation of the volatile organic material and HAPs material usage figures.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) that 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.
2. The permittee shall collect and record the following information for each day of operation of this emissions unit:
 - a. All 3-hour blocks of time (when the emissions unit was in operation) during which

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the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;

- b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each month for this emissions unit:
- a. The name and identification number of each coating and cleanup material employed;
 - b. The VOC content of each coating and cleanup material, as applied, in pounds of VOC per gallon applied (PVGC);
 - c. The number of gallons of each coating and cleanup material (which shall be equal to the amount of each fresh cleanup material required minus the amount of each cleanup material recovered for disposal, in gallons) employed (CT);
 - d. For each coating and cleanup material, the amount of volatile organic material used and uncontrolled VOC sent to the control device, in tons per month, defined as "CVOC" and calculated as follows:

$$\text{CVOC} = [(CT) * (PVGC) * (1 \text{ ton}/2000 \text{ lbs})];$$
 - e. The total amount of volatile organic material used and uncontrolled VOC sent to the control device from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated as a summation of C.3.d;
 - f. The total controlled VOC emission rate from this emissions unit from all coatings and cleanup material employed, in tons per month, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission test that demonstrated that the emissions unit was in compliance); and

issuance of this permit;

- h. The rolling, 12-month summation of the volatile organic material usage figures for the facility*, calculated by summing the volatile organic material used and uncontrolled VOC sent to the control device from each emissions unit (C.3.e above), in tons; and
- i. The rolling, 12-month summation of the controlled VOC emissions for the facility*, in tons, calculated by multiplying the uncontrolled VOC tons per month by (1 - RE) (where RE = overall removal efficiency of the control device as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

- 5. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN3 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone

TLV (mg/m³): 1187.12

Maximum Hourly Emission Rate (lbs/hr): 3.25

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 170.1

MAGLC (ug/m³): 28,264.68

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

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
7. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
8. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

Emissions Unit ID: **K013**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed did not comply with the temperature limitation specified above. (These reports do not waive the malfunction reporting requirements of OAC rule 3745-15-06.)
 2. The permittee shall submit annual reports that specify the total VOC emissions, in tons, from the coatings and cleanup material for this emissions unit, and the total individual HAP emissions from the coatings and cleanup materials and the total combined HAPs emissions from the coatings and cleanup materials, in tons, for the entire facility, for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
 3. The permittee shall submit quarterly deviation reports that identify all exceedances of the annual VOC emission limitation for this emissions unit.
 4. The permittee shall submit quarterly deviation reports that identify the following information for the facility*:
 - a. All exceedances of the rolling, 12-month volatile organic material usage and VOC emission limitations;
 - b. All exceedances of the rolling, 12-month HAP material usage and emission limitations for combined HAPs and each individual HAP; and
 - c. During the first 12 calendar months of operation, all exceedances of the cumulative monthly VOC, individual HAP and combined HAPs material use and emissions limitations.
 5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
- * The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

E. Testing Requirements

1. The facility shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 30 days following start of full production capacity.
 - b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and the overall removal efficiency and control efficiency limitations for VOC.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods which must be employed to demonstrate compliance with the overall control efficiency limitations for VOC are specified below.
 - d. The test(s) shall be conducted under maximum production rates unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
 - e. 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.
2. Not later than 30 days prior to the proposed test date(s), this facility shall submit an

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"Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission tests.

3. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.
5. Emission Limitation:
85% overall VOC removal efficiency and 90% control efficiency

Applicable Compliance Method:

Compliance shall be determined according to OAC rule 3745-21-10(C) and the emissions testing procedures required in sections E.1 through E.4 of these terms and conditions.

6. Emission Limitation:
4.34 pounds VOC per hour

Applicable Compliance Method:

Compliance shall be determined as part of emissions testing, required in section E.1 of these terms and conditions.

7. Emission Limitation:
19.02 TPY VOC

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in section C.3.g of these terms and conditions.

8. Emission Limitation:
VOC emissions from the facility* shall not exceed 93.0 tons per rolling, 12-month period (from coatings and cleanup).

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

9. Emission Limitation:
The maximum annual Hazardous Air Pollutant (HAP) emissions generated at this facility* shall not exceed 7.5 tons per year for any single HAP and 18.75 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

10. Emission Limitation:
The maximum annual volatile organic material usage (coatings and cleanup) at this facility* shall not exceed 620 tons (before controls), based upon a rolling, 12-month summation of the volatile organic material usage figures. The maximum annual HAP material usage (coatings and cleanup) at this facility* shall not exceed 50 tons of any individual HAP nor 125 tons of combined HAPs (before controls), based upon a rolling, 12-month summation of the HAP material usage figures.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in sections C.3 and C.4 of these terms and conditions.

11. USEPA Method 24 or Method 24A shall be used to determine the organic compound contents of the coatings.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the cleanup materials.

12. Formulation data shall be used to determine the HAP contents of the coatings and cleanup materials.

* The facility includes the following emissions units: K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012 and K013.

EXAL

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F. Miscellaneous Requirements

1. Prior to coating beverage cans (as defined in 40 CFR Part 60, Subpart WW), the permittee shall apply for and obtain an Ohio EPA permit to install.
2. Pursuant to OAC rule 3745-31-05(C), the following terms and conditions are federally enforceable: sections A, B, C, D, E and F.