



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

9/22/2009

Certified Mail

Mr. Brian Cromie
REXAM Beverage Can Co
10444 Waterville
Whitehouse, OH 43571

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0448002007
Permit Number: P0105399
Permit Type: Administrative Modification
County: Lucas

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Toledo Blade. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
TDES; Michigan; Indiana; Canada

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

PUBLIC NOTICE
Issuance Of Draft Air Pollution Permit-To-Install
REXAM Beverage Can Co

Issue Date: 9/22/2009
Permit Number: P0105399
Permit Type: Administrative Modification
Permit Description: Modification of three beverage can production lines (K010, K011, K012) and the creation of a new emission unit (K015) to centralize clean-up emissions.
Facility ID: 0448002007
Facility Location: REXAM Beverage Can Co
10444 Waterville Swanton Rd.,
Whitehouse, OH 43571
Facility Description: Metal Can Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Mary Lehman-Schmidt at Toledo Department of Environmental Services, 348 South Erie Street or (419)936-3015. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This PTI is for the modification of three can coating lines (K010, K011, & K012) and the creation of a new emission unit for facility-wide clean-up (K015). The emissions associated with the clean-up activity at this facility are currently distributed among the various can coating lines. The clean-up activity is actually performed at a central location for all of these lines and currently the emissions are assigned to each line, based on the percentage of production performed. In order to simplify tracking of clean-up solvents, the facility is requesting creation of a separate emission unit to track clean-up activity for the entire facility.

Also, the basecoater and associated oven from Emission Unit K010 was relocated to Emission Unit K012 when K012 was created, but was not removed from K010. Therefore the emissions associated with the basecoater on K010 will be removed.

Facility also requested a change in description of the can coating lines K010, K011, & K012 to match their internal description. For example, K010 is referred to as Line 2 in EPA's description, but internally it is referred to as Line 3. To eliminate any misunderstanding, the EPA descriptions were changed to match internal references. The changes are shown in the table below:

Emission Unit ID	Old EPA description	New EPA description
K010	Line #2	Line #3
K011	Line #3	Line #4
K012	Line #4	Line #2

3. Facility Emissions and Attainment Status:

This facility is a major source of VOC emissions. The facility has taken a voluntary restriction to make HAP emissions minor. All other criteria pollutants are minor.

Pollutant	Significant Net Emission Increase Levels	Attainment Status
PM2.5	250 TPY	attainment
PM10	250 TPY	attainment
SO2	250 TPY	attainment
VOC	250 TPY	attainment
NOx	250 TPY	attainment
CO	250 TPY	attainment



4. Source Emissions:

No new emissions were added to emission units K010, K011, and K012. The only changes made were to transfer the emissions from clean-up solvent from these emission units to a new emission unit created for clean-up operation (K015) and to remove the basecoat emissions from K010. The basecoater equipment that was used in K010 was relocated to the newer emission unit K012 in PTI 04-01473, but the basecoater emissions were never removed from K010. The following is a summary of the emission calculations for each emission unit:

K010

A. Continuous Motion Printer

The coating data used to develop worst case VOC emissions is based on information provided by the facility in Application for PTI 04-01465. No coating data has changed. VOC emissions controlled by RTO.

Over varnish 10.31 gal OV applied/hr maximum, 74,435 gal OV applied/yr maximum, 11.2% VOC by (OV): weight, density 8.75 lb/gal
Bottom varnish 0.58 gal BV applied/hr maximum, 4120 gal BV applied/yr maximum, 14.9% VOC by (BV): weight, density 9.0 lb/gal
Inks: 1.01 gal ink applied/hr maximum, 7188 gal ink applied/yr, maximum 14% VOC by weight, density 12.96 lb/gal

CE (RTO capture & control efficiency) = (0.95)(0.72) = 0.684

Hourly Emissions with RTO controls $[(10.31 \text{ gal OV/hr})(8.75 \text{ lb OV/gal OV})(0.112 \text{ lb VOC/lb OV}) + (0.58 \text{ gal BV/hr})(9.0 \text{ lb BV/gal BV})(0.149 \text{ lb VOC/lb BV}) + (1.01 \text{ gal ink/hr})(12.96 \text{ lb ink/gal ink})(0.14 \text{ lb VOC/lb ink})](1-CE) = 4.02 \text{ lb VOC/hr}$

Annual Emissions with RTO controls $\{[(74,435 \text{ gal OV/yr})(8.75 \text{ lb OV/gal OV})(0.112 \text{ lb VOC/lb OV}) + (4,120 \text{ gal BV/yr})(9.0 \text{ lb BV/gal BV})(0.149 \text{ lb VOC/lb BV}) + (7,188 \text{ gal ink/yr})(12.96 \text{ lb ink/gal ink})(0.14 \text{ lb VOC/lb ink})](1-CE)\}/2000 \text{ lb/ton} = 14.45 \text{ tons VOC/yr}$

B. Continuous Motion Printer Oven

The continuous motion printer oven emissions are based on potential to emit with a maximum fuel usage of 3.00 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

CO $(84 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.25 \text{ lb/hr};$
 $(0.25 \text{ lb/hr})(8760 \text{ hr/yr})/(2000\text{lb/ton}) = 1.10 \text{ ton/yr}$
NO_x $(100 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.29 \text{ lb/hr};$
 $(0.29 \text{ lb/hr})(8760 \text{ hr/yr})/(2000\text{lb/ton}) = 1.27 \text{ ton/yr}$
PE $(1.9 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.006 \text{ lb/hr};$
 $(0.006 \text{ lb/hr})(8760 \text{ hr/yr})/(2000\text{lb/ton}) = 0.03 \text{ ton/yr}$
PM₁₀ $(7.6 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.02 \text{ lb/hr};$
 $(0.02 \text{ lb/hr})(8760 \text{ hr/yr})/(2000\text{lb/ton}) = 0.09 \text{ ton/yr}$
SO₂ $(0.06 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.0002 \text{ lb/hr};$
 $(0.0002 \text{ lb/hr})(8760 \text{ hr/yr})/(2000\text{lb/ton}) = 0.01 \text{ ton/yr}$



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$$\text{VOC} \quad (5.5 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})(1\text{-CE})/(1020 \text{ mmBtu/mmscf}) = 0.01 \text{ lb/hr};$$

$$(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$$

C. Inside Spray

The coating data used to develop worst case VOC and PE/PM₁₀ emissions is based on information provided by the facility in Application for PTI 04-01465. No coating data has changed. VOC emissions controlled by RTO.

Inside Spray (IS): 26.08 gal IS/hr maximum, 186,095 gal IS/yr maximum, 14.4% VOC by weight, density 8.43 lb/gal, solids content 21.1% by weight, 94% transfer efficiency and 90% collection efficiency of solids

$$\text{CE} \quad (\text{RTO capture \& control efficiency}) = (0.95)(0.72) = 0.684$$

Hourly VOC emissions with RTO controls (26.08 gal IS/hr)(8.43 lb IS/gal IS)(0.144 lb VOC/lb IS)(1-CE) = 10.00 lb VOC/hr

Hourly PE/PM₁₀ emissions (26.08 gal IS/hr)(8.43 lb IS/gal IS)(0.211 lb PM/lb IS)(1-(0.94))(1-(0.90)) = 0.28 lb PM/hr

Annual VOC emissions with RTO controls (186,095 gal IS/yr)(8.43 lb IS/gal IS)(0.144 lb VOC/lb IS)(1-CE)/ (2000 lb/ton) = 35.69 tons VOC/yr

Annual PE/PM₁₀ emissions (186,095 gal IS/yr)(8.43 lb IS/gal IS)(0.211 lb PM/lb IS) (1-(0.94))(1-(0.90)) /2000 lb/ton = 0.99 ton PM/yr

D. Inside Spray Oven

The inside spray oven emissions are based on potential to emit with a maximum fuel usage of 3.55 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

$$\text{CO} \quad (84 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.29 \text{ lb/hr};$$

$$(0.29 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.28 \text{ ton/yr}$$

$$\text{NO}_x \quad (100 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.35 \text{ lb/hr};$$

$$(0.35 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.52 \text{ ton/yr}$$

$$\text{PE} \quad (1.9 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.007 \text{ lb/hr};$$

$$(0.007 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.03 \text{ ton/yr}$$

$$\text{PM}_{10} \quad (7.6 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.03 \text{ lb/hr};$$

$$(0.03 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.12 \text{ ton/yr}$$

$$\text{SO}_2 \quad (0.06 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.002 \text{ lb/hr};$$

$$(0.002 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.01 \text{ ton/yr}$$

$$\text{VOC} \quad (5.5 \text{ lb/mmscf})(3.55 \text{ mmBtu/hr})(1\text{-CE})/(1020 \text{ mmBtu/mmscf}) = 0.006 \text{ lb/hr};$$

$$(0.005 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.03 \text{ ton/yr}$$



E. K010 Total Emissions

CO	0.25 lb/hr + 0.29 lb/hr = 0.54 lb/hr 1.10 ton/yr + 1.28 ton/yr = 2.38 ton/yr
NO _x	0.29 lb/hr + 0.35 lb/hr = 0.62 lb/hr 1.27 ton/yr + 1.52 ton/yr = 2.79 ton/yr
PE	0.006 lb/hr + 0.28 lb/hr + 0.007 lb/hr = 0.29 lb/hr 0.03 ton/yr + 0.99 ton/yr + 0.03 ton/yr = 1.05 ton/yr
PM ₁₀	0.02 lb/hr + 0.28 lb/hr + 0.03 lb/hr = 0.33 lb/hr 0.09 ton/yr + 0.99 ton/yr + 0.12 ton/yr = 1.20 ton/yr
SO ₂	0.0002 lb/hr + 0.002 lb/hr = 0.002 lb/hr 0.01 ton/yr + 0.01 ton/yr = 0.02 ton/yr
VOC	4.02 lb/hr + 0.01 lb/hr + 10.0 lb/hr + 0.006 lb/hr = 14.04 lb/hr 14.45 tons/yr + 0.04 ton/yr + 35.69 tons/yr + 0.03 ton/yr = 50.21 tons/yr

All emissions, except VOC emissions, are less than 10 tons per year, and therefore per OAC rule 3745-31-05(A)(a)(ii) are not subject to BAT.

K011

A. Continuous Motion Printer

The coating data used to develop worst case VOC emissions is based on information provided by the facility in Application for PTI 04-01465. No coating data has changed. No RTO controls for VOC.

Over varnish (OV):	10.08 gal OV applied/hr maximum, 64,088 gal OV applied/yr maximum, 11.2% VOC by weight, density 8.75 lb/gal
Bottom varnish (BV):	0.58 gal BV applied/hr maximum, 3,671 gal BV applied/yr maximum, 14.9% VOC by weight, density 9.0 lb/gal
Inks:	1.01 gal ink applied/hr maximum, 6,404 gal ink applied/yr, maximum 14% VOC by weight, density 12.96 lb/gal

Hourly Emissions (10.08 gal OV/hr)(8.75 lb OV/gal OV)(0.112 lb VOC/lb OV) + (0.58 gal BV/hr)(9.0 lb BV/gal BV)(0.149 lb VOC/lb BV) + (1.01 gal ink/hr)(12.96 lb ink/gal ink)(0.14 lb VOC/lb ink) = 12.49 lb VOC/hr

Annual Emissions [(64,088 gal OV/yr)(8.75 lb OV/gal OV)(0.112 lb VOC/lb OV) + (3,671 gal BV/yr)(9.0 lb BV/gal BV)(0.149 lb VOC/lb BV) + (6,404 gal ink/yr)(12.96 lb ink/gal ink)(0.14 lb VOC/lb ink)] /2000 lb/ton = 39.67 tons VOC/yr

B. Continuous Motion Printer Oven

The continuous motion printer oven emissions are based on potential to emit with a maximum fuel usage of 2.75 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98.

CO	(84 lb/mmscf)(2.75 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.23 lb/hr; (0.23 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.99 ton/yr
NO _x	(100 lb/mmscf)(2.75 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.27 lb/hr; (0.27 lb/hr)(8760 hr/yr)/(2000lb/ton) = 1.18 ton/yr



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PE $(1.9 \text{ lb/mmscf})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.005 \text{ lb/hr};$
 $(0.005 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.02 \text{ ton/yr}$
 PM₁₀ $(7.6 \text{ lb/mmscf})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.02 \text{ lb/hr};$
 $(0.02 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.09 \text{ ton/yr}$
 SO₂ $(0.06 \text{ lb/mmscf})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.002 \text{ lb/hr};$
 $(0.002 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.01 \text{ ton/yr}$
 VOC $(5.5 \text{ lb/mmscf})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.02 \text{ lb/hr};$
 $(0.02 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.09 \text{ ton/yr}$

C. Inside Spray Emissions

The coating data used to develop worst case VOC and PE/PM₁₀ emissions is based on information provided by the facility in Application for PTI 04-01465. No coating data has changed. VOC emissions controlled by RTO.

Inside Spray (IS): 26.08 gal IS/hr maximum, 165,812 gal IS/yr maximum, 14.4% VOC by weight, density 8.43 lb/gal, solids content 21.1% by weight, 94% transfer efficiency and 90% collection efficiency of solids

CE (RTO capture & control efficiency) = $(0.95)(0.72) = 0.684$

Hourly VOC emissions with RTO controls $(26.08 \text{ gal IS/hr})(8.43 \text{ lb IS/gal IS})(0.144 \text{ lb VOC/lb IS})(1-CE) = 10.00 \text{ lb VOC/hr}$

Hourly PE/PM₁₀ emissions $(26.08 \text{ gal IS/hr})(8.43 \text{ lb IS/gal IS})(0.211 \text{ lb PM/lb IS}) (1-(0.94))(1-(0.90)) = 0.28 \text{ lb PM/hr}$

Annual VOC emissions with RTO controls $(165,812 \text{ gal IS/yr})(8.43 \text{ lb IS/gal IS})(0.144 \text{ lb VOC/lb IS})(1-CE)/ (2000 \text{ lb/ton}) = 31.80 \text{ tons VOC/yr}$

Annual PE/PM₁₀ emissions $(165,812 \text{ gal IS/yr})(8.43 \text{ lb IS/gal IS})(0.211 \text{ lb PM/lb IS})[1-(0.94)(0.90)] /2000 \text{ lb/ton} = 0.88 \text{ ton PM/yr}$

D. Inside spray Oven

The inside spray oven emissions are based on potential to emit with a maximum fuel usage of 5.20 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

CO $(84 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.43 \text{ lb/hr};$
 $(0.43 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.88 \text{ ton/yr}$
 NO_x $(100 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.51 \text{ lb/hr};$
 $(0.51 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 2.23 \text{ ton/yr}$
 PE $(1.9 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$
 PM₁₀ $(7.6 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.04 \text{ lb/hr};$
 $(0.04 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.17 \text{ ton/yr}$
 SO₂ $(0.06 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.003 \text{ lb/hr};$
 $(0.003 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.01 \text{ ton/yr}$



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VOC $(5.5 \text{ lb/mmscf})(5.20 \text{ mmBtu/hr})(1-CE)/(1020 \text{ mmBtu/mmscf}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$

E. K011 Total Emissions

CO $0.23 \text{ lb/hr} + 0.43 \text{ lb/hr} = 0.66 \text{ lb/hr}$
 $0.99 \text{ ton/yr} + 1.88 \text{ tons/yr} = 2.87 \text{ tons/yr}$
 NO_x $0.27 \text{ lb/hr} + 0.51 \text{ lb/hr} = 0.78 \text{ lb/hr}$
 $1.18 \text{ tons/yr} + 2.23 \text{ tons/yr} = 3.41 \text{ tons/yr}$
 PE $0.005 \text{ lb/hr} + 0.28 \text{ lb/hr} + 0.01 \text{ lb/hr} = 0.30 \text{ lb/hr}$
 $0.02 \text{ ton/yr} + 0.88 \text{ ton/yr} + 0.04 \text{ ton/yr} = 0.94 \text{ ton/yr}$
 PM₁₀ $0.02 \text{ lb/hr} + 0.28 \text{ lb/hr} + 0.04 \text{ lb/hr} = 0.34 \text{ lb/hr}$
 $0.09 \text{ ton/yr} + 0.88 \text{ ton/yr} + 0.17 \text{ ton/yr} = 1.14 \text{ tons/yr}$
 SO₂ $0.002 \text{ lb/hr} + 0.003 \text{ lb/hr} = 0.01 \text{ lb/hr}$
 $0.01 \text{ ton/yr} + 0.01 \text{ ton/yr} = 0.02 \text{ ton/yr}$
 VOC $12.49 \text{ lbs/hr} + 0.01 \text{ lb/hr} + 10.0 \text{ lbs/hr} + 0.01 \text{ lb/hr} = 22.51 \text{ lbs/hr}$
 $39.67 \text{ tons/yr} + 0.09 \text{ ton/yr} + 31.80 \text{ tons/yr} + 0.04 \text{ ton/yr} = 71.60 \text{ tons/yr}$

All emissions, except VOC emissions, are less than 10 tons per year, and therefore per OAC rule 3745-31-05(A)(a)(ii) are not subject to BAT.

K012

A. Basecoater

The coating data used to develop worst case VOC emissions is based on information provided by the facility in Application for PTI 04-01473. No coating data has changed. VOC emissions controlled by RTO.

Basecoat (BC): $5.75 \text{ gal BC/hr maximum, } 35,597 \text{ gal BC/yr maximum, } 8.8\% \text{ VOC by weight, density } 11.0 \text{ lb/gal}$

CE (RTO capture & control efficiency) = $(0.95)(0.72) = 0.684$

Hourly VOC Emissions with RTO controls $(5.75 \text{ gal BC/hr})(11.0 \text{ lb BC/gal BC})(0.088 \text{ lb VOC/lb BC})(1-CE) = 1.76 \text{ lb VOC/hr}$

Annual VOC Emissions with RTO controls $(35,597 \text{ gal BC/yr})(11.0 \text{ lb BC/gal BC})(0.088 \text{ lb VOC/lb BC})(1-CE) / 2000 \text{ lb/ton} = 5.44 \text{ tons VOC/yr}$

B. Basecoater Oven

The basecoater oven emissions are based on potential to emit with a maximum fuel usage of 3.00 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

CO $(84 \text{ lb/mmscf})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmscf}) = 0.25 \text{ lb/hr};$



$(0.25 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.08 \text{ ton/yr}$
 $(100 \text{ lb/mmBtu})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.29 \text{ lb/hr};$
 $(0.29 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.29 \text{ ton/yr}$
 PE $(1.9 \text{ lb/mmBtu})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$
 PM₁₀ $(7.6 \text{ lb/mmBtu})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.02 \text{ lb/hr};$
 $(0.02 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.09 \text{ ton/yr}$
 SO₂ $(0.06 \text{ lb/mmBtu})(3.00 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$
 VOC $(5.5 \text{ lb/mmBtu})(3.00 \text{ mmBtu/hr})(1-CE)/(1020 \text{ mmBtu/mmBtu}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$

C. Continuous Motion Printer

The coating data used to develop worst case VOC emissions is based on information provided by the facility in Application for PTI 04-01473. No coating data has changed. VOC emissions controlled by RTO.

Over varnish 9.43 gal OV applied/hr maximum, 64,335 gal OV applied/yr maximum, 11.2% VOC by (OV): weight, density 8.75 lb/gal
 Bottom 0.43 gal BV applied/hr maximum, 2,885 gal BV applied/yr maximum, 14.9% VOC by varnish (BV): weight, density 9.0 lb/gal
 Inks: 0.71 gal ink applied/hr maximum, 4,363 gal ink applied/yr, maximum 14% VOC by weight, density 12.96 lb/gal

CE (RTO capture & control efficiency) = (0.95)(0.72) = 0.684

Hourly Emissions with RTO controls $[(9.43 \text{ gal OV/hr})(8.75 \text{ lb OV/gal OV})(0.112 \text{ lb VOC/lb OV}) + (0.43 \text{ gal BV/hr})(9.0 \text{ lb BV/gal BV})(0.149 \text{ lb VOC/lb BV}) + (0.71 \text{ gal ink/hr})(12.96 \text{ lb ink/gal ink})(0.14 \text{ lb VOC/lb ink})](1-CE) = 3.51 \text{ lb VOC/hr}$
 Annual Emissions with RTO controls $\{[(64,335 \text{ gal OV/yr})(8.75 \text{ lb OV/gal OV})(0.112 \text{ lb VOC/lb OV}) + (2,885 \text{ gal BV/yr})(9.0 \text{ lb BV/gal BV})(0.149 \text{ lb VOC/lb BV}) + (4,363 \text{ gal ink/yr})(12.96 \text{ lb ink/gal ink})(0.14 \text{ lb VOC/lb ink})](1-CE)\}/2000 \text{ lb/ton} = 11.82 \text{ tons VOC/yr}$

D. Continuous Motion Printer Oven

The basecoater oven emissions are based on potential to emit with a maximum fuel usage of 2.75 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

CO $(84 \text{ lb/mmBtu})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.23 \text{ lb/hr};$
 $(0.23 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.99 \text{ ton/yr}$
 NO_x $(100 \text{ lb/mmBtu})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.27 \text{ lb/hr};$
 $(0.27 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 1.18 \text{ ton/yr}$
 PE $(1.9 \text{ lb/mmBtu})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.01 \text{ lb/hr};$
 $(0.01 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.04 \text{ ton/yr}$
 PM₁₀ $(7.6 \text{ lb/mmBtu})(2.75 \text{ mmBtu/hr})/(1020 \text{ mmBtu/mmBtu}) = 0.02 \text{ lb/hr};$
 $(0.02 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 0.09 \text{ ton/yr}$



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Permit Strategy Write-Up
Permit Number: P0105399
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SO₂ (0.06 lb/mmscf)(2.75 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.01 lb/hr;
(0.01 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.04 ton/yr
VOC (5.5 lb/mmscf)(2.75 mmBtu/hr)(1-CE)/(1020 mmBtu/mmscf) = 0.02 lb/hr;
(0.02 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.09 ton/yr

E. Inside Spray

The coating data used to develop worst case VOC emissions is based on information provided by the facility in Application for PTI 04-01473. No coating data has changed. VOC emissions controlled by RTO.

Inside Spray (IS): 18.39 gal IS/hr maximum, 124,021 gal IS/yr maximum, 14.4% VOC by weight, density 8.43 lb/gal, solids content 21.1% by weight, 94% transfer efficiency and 90% collection efficiency of solids

CE (RTO capture & control efficiency) = (0.95)(0.72) = 0.684

Hourly VOC emissions with RTO controls (18.39 gal IS/hr)(8.43 lb IS/gal IS)(0.144 lb VOC/ lb IS)(1-CE) = 7.05 lb VOC/hr

Hourly PE/PM₁₀ emissions (18.39 gal IS/hr)(8.43 lb IS/gal IS)(0.211 lb PM/lb IS)(1-(0.94))(1-(0.90)) = 0.20 lb PM/hr

Annual VOC emissions with RTO controls (124,021 gal IS/yr)(8.43 lb IS/gal IS)(0.144 lb VOC/lb IS)(1-CE)/ (2000 lb/ton) = 23.79 tons VOC/yr

Annual PE/PM₁₀ emissions (124,021 gal IS/yr)(8.43 lb IS/gal IS)(0.211 lb PM/lb IS)(1-(0.94))(1-(0.90)) /2000 lb/ton = 0.66 ton PM/yr

F. Inside Spray Oven

The Inside Spray oven emissions are based on potential to emit with a maximum fuel usage of 5.70 mmBtu/hr and emissions factors from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, dated 7/98. VOC emissions controlled by RTO.

CO (84 lb/mmscf)(5.70 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.47 lb/hr;
(0.23 lb/hr)(8760 hr/yr)/(2000lb/ton) = 2.06 ton/yr
NO_x (100 lb/mmscf)(5.70 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.56 lb/hr;
(0.27 lb/hr)(8760 hr/yr)/(2000lb/ton) = 2.45 ton/yr
PE (1.9 lb/mmscf)(5.70 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.01 lb/hr;
(0.01 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.04 ton/yr
PM₁₀ (7.6 lb/mmscf)(5.70 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.04 lb/hr;
(0.02 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.19 ton/yr
SO₂ (0.06 lb/mmscf)(5.70 mmBtu/hr)/(1020 mmBtu/mmscf) = 0.01 lb/hr;
(0.01 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.04 ton/yr
VOC (5.5 lb/mmscf)(5.70 mmBtu/hr)(1-CE)/(1020 mmBtu/mmscf) = 0.03 lb/hr;
(0.02 lb/hr)(8760 hr/yr)/(2000lb/ton) = 0.14 ton/yr



G. K012 Total Emissions

CO 0.25 lb/hr + 0.23 lb/hr + 0.47 lb/hr = 0.95 lb/hr
 1.08 tons/yr + 0.99 ton/yr + 2.06 tons/yr = 4.13 tons/yr

NO_x 0.29 lb/hr + 0.27 lb/hr + 0.56 lb/hr = 1.12 lbs/hr
 1.29 tons/yr + 1.18 tons/yr + 2.45 tons/yr = 4.92 tons/yr

PE 0.01 lb/hr + 0.01 lb/hr + 0.20 lb/hr + 0.01 lb/hr = 0.05 lb/hr
 0.04 ton/yr + 0.04 ton/yr + 0.66 ton/yr + 0.04 ton/yr = 0.78 ton/yr

PM₁₀ 0.02 lb/hr + 0.02 lb/hr + 0.20 lb/hr + 0.04 lb/hr = 0.28 lb/hr
 0.09 ton/yr + 0.09 ton/yr + 0.66 ton/yr + 0.19 ton/yr = 1.03 tons/yr

SO₂ 0.01 lb/hr + 0.01 lb/hr + 0.01 lb/hr = 0.03 lb/hr
 0.04 ton/yr + 0.04 ton/yr + 0.04 ton/yr = 0.12 ton/yr

VOC 1.76 lbs/hr + 0.01 lb/hr + 3.51 lbs/hr + 0.02 lb/hr + 7.05 lbs/hr + 0.03 lb/hr = 12.38 lbs/hr
 5.44 tons/yr + 0.04 ton/yr + 11.82 tons/yr + 0.09 ton/yr + 23.79 tons/yr + 0.14 ton/yr = 41.32 tons/yr

All emissions, except VOC emissions, are less than 10 tons per year, and therefore per OAC rule 3745-31-05(A)(a)(ii) are not subject to BAT.

K015

The emissions for this emission unit were calculated based on the clean-up solvent material usage the facility declared for emission units K010, K011, and K012 as stated in PTI P0104686 and PTI P0104696, both issued on 5/18/2009. There was no material usage declared for emission unit K009. No usage restriction was assigned to clean-up solvent for K009 per PTI 04-01429 dated 11/29/2005. To take into account the clean-up material usage for K009, an amount of 306 gallons was added to the usage amounts of K010, K011 and K012 per discussion with the facility, as shown below:

Emission Unit	Clean-up Usage (gallons)
K009	306
K010	700
K011	360
K012	634
Total Gallons	2,000

The emissions clean-up solvent usage previously assigned to K010, K011, and K012 were transferred from emissions that were previously assigned to those emission units and is therefore no net increase in emissions. The additional clean-up usage added (306 gallons) for K009, are more than offset by the removal of emissions from the basecoater that was removed from K010, as shown below:

Basecoater (BC) 6.22 gal BC/hr maximum, 9,600 gal BC/yr maximum, 8.8% VOC by weight, (from K010): density 11.0 lb/gal

Hourly VOC Emissions (6.22 gal BC/hr)(11.0 lb BC/gal BC)(0.088 lb VOC/lb BC) = 6.02 lb VOC/hr

Annual VOC Emissions (9,600 gal BC/yr)(11.0 lb BC/gal BC)(0.088 lb VOC/lb BC) /2000 lb/ton = 4.65 tons VOC/yr

Clean-up solvent from K009: 306 gal/yr, 6.55 lb VOC/gal

Clean-up emissions from K009: (306 gal/yr)(6.55 lb/VOC/gal) /(2000 lb/ton) = 1.0 ton/yr



The additional VOC emissions due to clean-up solvent for K009 (1.0 ton/yr) is more than offset by the removal of emissions from basecoater for K010 (4.65 tons/yr). Therefore there is a net reduction in VOC emissions for this modification (4.65 tons/yr – 1.0 ton/yr = 3.65 tons/yr).

The total clean-up emissions for emissions unit K015 is:

Clean-up emissions: $(2,000 \text{ gal/yr})(6.55 \text{ lb VOC/gal}) / (2000 \text{ lbs/ton}) = 6.55 \text{ tons VOC/yr}$

5. Conclusion:

The previous method for tracking clean-up emissions did not reflect the way it is used in the facility. The clean-up for all the emission units is done at a central location. The facility must apportion the emissions to each emission unit in a somewhat arbitrary fashion, based on percent production of each emission unit. A central emissions unit makes the record keeping much simpler without losing any tracking capability. The basecoater emissions should have been removed from K010 when it's equipment was transferred to K012. There is a facility wide reduction in admissions, so no PSD review was required. It is recommended that this modification be approved.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
HAPs	9.9 single, 24.9 combined; facility-wide
CO	11.90 (-2.59)
NOx	14.16 (-3.06)
PE	2.82 (-0.36)
PM ₁₀	2.90(-1.19)
SO ₂	0.18 (-0.08)
VOC	169.66(-3.65)



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

DRAFT

**Air Pollution Permit-to-Install
for
REXAM Beverage Can Co**

Facility ID: 0448002007
Permit Number: P0105399
Permit Type: Administrative Modification
Issued: 9/22/2009
Effective: To be entered upon final issuance



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install
 for
 REXAM Beverage Can Co

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0448002007

Facility Description: Metal beverage can manufacturing facility

Application Number(s): M0000562

Permit Number: P0105399

Permit Description: Modification of three beverage can production lines (K010, K011, K012) and the creation of a new emission unit (K015) to centralize clean-up emissions.

Permit Type: Administrative Modification

Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 9/22/2009

Effective Date: To be entered upon final issuance

This document constitutes issuance to:

REXAM Beverage Can Co
10444 Waterville Swanton Rd.
Whitehouse, OH 43571

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419)936-3015

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

Chris Korleski
Director



Authorization (continued)

Permit Number: P0105399

Permit Description: Modification of three beverage can production lines (K010, K011, K012) and the creation of a new emission unit (K015) to centralize clean-up emissions.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	K010
Company Equipment ID:	Modified Can Manufacturing Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K011
Company Equipment ID:	Modified Can Manufacturing Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K012
Company Equipment ID:	Can Manufacturing Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K015
Company Equipment ID:	K013
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Toledo Department of Environmental Services.



(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Toledo Department of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Toledo Department of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Toledo Department of Environmental Services in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. **Compliance Requirements**

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

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

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



- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Toledo Department of Environmental Services concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Toledo Department of Environmental Services.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Toledo Department of Environmental Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted



(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Toledo Department of Environmental Services must be notified in writing of any transfer of this permit.

18. Risk Management Plans

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

19. Title IV Provisions

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



State of Ohio Environmental Protection Agency
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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. K010, Modified Can Manufacturing Line

Operations, Property and/or Equipment Description:

Modified beverage can production line #3 for 24 oz. size cans – consisting of can making equipment (cupper, body makers and trimmers), a continuous motion printer with 3.00 mmBtu/hr printer pin oven and an interior body sprayer with a 3.55 mmBtu/hr inside bake oven; both the continuous motion printer oven and the inside bake oven to be controlled with a 7.3 mmBtu/hr regenerative thermal oxidizer (RTO).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 50.21 tons per rolling, 12-month period.</p> <p>See b)(2)a. and c)(3).</p>
b.	OAC rule 3745-31-05(A)(3)	<p>VOC emissions shall not exceed 14.04 pounds per hour.</p> <p>See b)(2)b., (2)h. and (2)i.</p>
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g.
d.	OAC rule 3745-17-07(A)(1)	Visible emissions from stacks this emissions unit shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
e.	OAC rule 3745-17-11(B)(1)	<p>Particulate Emissions (PE) shall not exceed 0.551 pounds per hour.</p> <p>See b)(2)j.</p>
f.	OAC rule 3745-18-06(A)	See (2)d.
g.	40 CFR Part 60, Subpart WW	See b)(2)c. and (2)e.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-21-09(D)(1)	See b)(2)c.
i.	OAC rule 3745-21-08(B)	See b)(2)f.
j.	40 CFR Part 60 Subpart A	See b)(2)k.

(2) Additional Terms and Conditions

- a. The emissions of hazardous air pollutants (HAPs) from this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.
- b. The hourly and annual emission limitations for the bake ovens were established for PTI purposes to reflect the potential to emit for the combustion of natural gas in this emissions unit at the maximum burner heat input capacity of 3.00 mmBtu per hour for the continuous motion printer oven and 3.55 mmBtu per hour for the inside spray bake oven. Therefore, it is not necessary to develop monitoring, record keeping, and/or reporting requirements to ensure compliance with these limitations.
- c. The emission limitation established by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).
- d. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- e. This emissions unit is subject to the applicable provisions of Subpart WW of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.
- f. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by the design of the emissions unit and the technology associated with the current operating practices.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However,



that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂, NO_x, PE, PM₁₀, and CO emissions from this air contaminant source since the uncontrolled potential to emit for SO₂, NO_x, PE, PM₁₀ and CO is less than 10 tons per year.

h. Volatile organic compound (VOC) emissions from individual coatings shall not exceed the following:

inks: 1.81 pounds per gallon of coating excluding water and exempt solvents;

over varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;

2.9 pounds per gallon of coating solids;

exterior bottom end varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;

2.9 pounds per gallon of coating solids;

inside spray: 3.5 pounds per gallon of coating excluding water and exempt solvents; and

6.8 pounds per gallon of coating solids.

i. For the regenerative thermal oxidizer (RTO), the capture efficiency shall be a minimum of 72% and the destructive efficiency shall be a minimum of 95% for VOC emissions from the continuous motion printer oven and inside body spray oven.

j. The inside body coating is the only coating sprayed and therefore is the only coating producing particulate emissions.

k. 40 CFR Part 60 Subpart A provides applicability, provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) The permittee shall burn only natural gas as fuel in this emissions unit.

(2) The individual HAP and total HAP, combined, emission rates for all emissions units at the facility shall not exceed 9.9 and 24.9 tons per year, respectively, based upon a rolling, 12-month summation of emission rates.



(3) Coating usage shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates:

Over varnish: 74,435 gallons;

Bottom varnish: 4,120 gallons;

Inside spray: 186,095 gallons; and

Inks: 7,188 gallons.

(4) The permittee shall not operate the body making equipment when the oil mist collection system is not in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas in this emissions unit; the permittee shall maintain a record of the type and quantity of fuel.

(2) The permittee shall collect and record the following information each month for the line:

a. For the coatings:

- i. the name and identification number of each coating (i.e., over varnish, bottom varnish, or inside spray coating), as applied;
- ii. the volume of each coating employed, in gallons;
- iii. the VOC content of each coating, in pounds of VOC per gallon of coating;
- iv. the VOC content of each coating, in pounds of VOC per gallon of coating excluding water and exempt solvents;
- v. the VOC content of each coating, in pounds of VOC per gallon of solids, as applied; and
- vi. the monthly total VOC emissions from all coatings employed, $[(ii) \times (iii) \times (1-TCE)] \div 2000$, in tons; (TCE = overall percentage total control efficiency of the RTO as determined during the most recent emissions test that demonstrated compliance).

b. For the inks:

- i. the name and identification number of each ink, as applied;
- ii. the volume (and mass) of each ink employed, in gallons (and pounds);
- iii. the VOC content of each ink, in pounds of VOC per gallon (and pounds) of ink;
- iv. the VOC content of each ink, in pounds of VOC per gallon of ink excluding water and exempt solvents;



- v. the monthly total VOC emissions from all inks employed, calculated on a volume (and mass) basis, $[(ii) \times (iii) \times (1-TCE)] \div 2000$, in tons; (TCE = overall percentage total capture & control efficiency of the RTO as determined during the most recent emissions test that demonstrated compliance).
 - c. the rolling 12-month summation of VOC emissions from all coatings and inks employed, in tons.
 - d. the rolling 12-month summation, of each type of coating employed in gallons.
 - e. the rolling 12-month summation, of all the types of ink employed in gallons (and pounds).
- (3) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 0.75 percent of the temperature being measured or ± 4.5 degrees Fahrenheit (± 2.5 degrees Celsius), whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and calculate the average combustion temperature within the thermal incinerator, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:
- a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance;
 - b. a log or record of the operating time for the capture (collection) system, thermal incinerator, monitoring equipment, and the associated emissions unit;
 - c. whenever the monitored value for the combustion temperature deviates from the range specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations; and
 - d. in response to each required investigation to determine the cause of the deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable combustion temperature specified above, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time of the deviation, the total period of time during which there was a deviation, the combustion temperature immediately after the



corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The permittee shall maintain records of the facility's potential to emit for each individual hazardous air pollutant and the total of all hazardous air pollutants combined by maintaining a formal up-to-date HAP emissions inventory from all HAP emissions units at the facility. The permittee shall maintain a record including methods, procedures, and assumptions supporting the calculations.
- (6) The permittee shall maintain daily records that document any time periods when the oil mist collection system was not in service when the body making equipment was in operation.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emission unit, as fuel. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.



- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all exceedances of the rolling, 12-month usage rate limitations for coatings specified under c)(3);
 - b. all exceedances of the rolling, 12-month emission limitation for VOC;
 - c. all exceedances of the rolling, 12-month emission limitations for individual HAP or any combination of HAP; and
 - d. identify all days during which any visible particulate emissions were observed from any stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions. If no visible emissions observed, then state no visible emissions occurred during that period.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
 - a. each period of time when the combustion temperature was outside the acceptable range;
 - b. an identification of each incident of deviation described in (4)a. where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (4)a. where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (4)a. where proper records were not maintained for the investigation and/or the corrective action.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (5) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the oil mist collector was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be



sent to the Director (the Toledo Division of Environmental Services) within 30 days after the event occurs.

(6) The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Emissions from all emissions units at the facility shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.

Applicable Compliance Method:

The monitoring and record keeping requirements of d)(5) will be used to demonstrate compliance.

b. Emission Limitation:

50.21 tons of VOC per rolling, 12-month period for this emissions unit

Applicable Compliance Method:

A one-time calculation of the yearly (12-month) federally enforceable usage limitation emissions, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings:

$$[\text{Sum of } \{(\text{Gallons of coating applied per year}) (\text{weight \% of solvent}) (\text{density of coating}) (1 - \text{CE}) \} + \text{sum of } \{ (\text{fuel usage rating}) (5.5 \text{ lb/mm}^3 \text{scf}) (1 - \text{CE}) \} / (1020 \text{ mm}^3 \text{Btu/mm}^3 \text{scf}) (2000 \text{ lb/ton}) \}] / (2000 \text{ lb/ton})$$

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

$$[(74,435 \text{ gal over varnish/yr})(0.112 \text{ lb VOC/lb overvarnish})(8.75 \text{ lb/gal})(1-0.684)+ (4120 \text{ gal bottom varnish/yr})(0.149 \text{ lb VOC/lb bottom varnish})(9.0 \text{ lb/gal})(1-0.684)+(186,095 \text{ gal inside spray/yr})(0.144 \text{ lb VOC/lb inside spray})(8.43 \text{ lb/gal})(1-0.684)+(7188 \text{ gal ink/yr})(0.14 \text{ lb VOC/lb ink})(12.96 \text{ lb/gal})(1-0.684)+(5.5 \text{ lb/mm}^3 \text{scf})(3.00 \text{ mm}^3 \text{BTU/hr})(8760 \text{ hr/yr})(1-0.684)/(1020 \text{ mm}^3 \text{BTU/mm}^3 \text{scf})+(5.5 \text{ lb/mm}^3 \text{scf})(3.55 \text{ mm}^3 \text{BTU/hr})(8760 \text{ hr/yr})(1-0.684)/(1020 \text{ mm}^3 \text{BTU/mm}^3 \text{scf})]/(2000 \text{ lb/ton})$$

c. Emission Limitation:

14.04 pounds of VOC per hour.



Applicable Compliance Method:

A one-time calculation of the hourly potential to emit, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings:

Sum of [(Gallons of coating applied per hour)(weight % of solvent)(density of coating)(1-CE)] + sum of [(fuel usage rating)(5.5 lb/mm scf)(1-CE)]/(1020 mmBtu/mm scf)

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

(10.31 gal over varnish/hr)(0.112 lb VOC/lb overvarnish)(8.75 lb/gal)(1-0.684)+(0.58 gal bottom varnish/hr)(0.149 lb VOC/lb bottom varnish)(9.0 lb/gal)(1-0.684)+(26.08 gal inside spray/hr)(0.144 lb VOC/lb inside spray)(8.43 lb/gal)(1-0.684)+(1.01 gal ink/hr)(0.14 lb VOC/lb ink)(12.96 lb/gal)(1-0.684)+(5.5 lb/mm scf)(3.00 mmBTU/hr)(1-0.684)/(1020 mmBTU/mm scf)+(5.5 lb/mm scf)(3.55 mmBTU/hr)(1-0.684)/(1020 mmBTU/mm scf)

If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

VE shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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

e. Emission Limitation:

2.1 pounds of VOC per gallon of coating (excluding water and exempt solvents) for over varnish and exterior bottom end varnish.

Applicable Compliance Method:

The monitoring and record keeping requirement in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use



formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

f. Emission Limitation:

2.9 pounds of VOC per gallon of coating solids for over varnish and exterior bottom end varnish.

Applicable Compliance Method:

The monitoring and record keeping requirement in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

g. Emission limitation:

1.81 pounds of VOC per gallon of coating (excluding water and exempt solvents) for inks.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(2). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

h. Emission Limitation:

3.5 pounds of VOC per gallon of coating (excluding water and exempt solvents) for the inside spray.



Applicable Compliance Method:

The monitoring and record keeping requirement in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If the permittee determines that Method 24 has not been used for a particular coating, the permittee shall request that the coating supplier perform Method 24 on the coating in question. If the supplier determines that Method 24 cannot be used, the permittee shall so notify the Administrator of the US EPA and pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, will request that the supplier use formulation data to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24.

i. Emission Limitation:

6.8 pounds of VOC per gallon of coating solids for the inside spray.

Applicable Compliance Method:

The monitoring and record keeping requirement in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be based upon approval by the Toledo Division of Environmental Services. If the permittee determines that Method 24 has not been used for a particular coating, the permittee shall request that the coating supplier perform Method 24 on the coating in question. If the supplier determines that Method 24 cannot be used, the permittee shall so notify the Administrator of the US EPA and pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, will request that the supplier use formulation data to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24.

j. Emission Limitation:

PE shall not exceed 0.551 pounds per hour.

Applicable Compliance Method:

Compliance for the body making process shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coolant usage (1.25 gal/hr) by the coolant density (8.55 lb coating/gal coating), the solid concentration (0.55 lb PE/lb coating) and one minus the estimated oil mist collector efficiency (1-0.95).

To this amount will be added the inside spray particulate emissions, whose compliance shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coating usage (26.08 gal/hr) by the coating



density (8.43 lb coating/gal coating), the solid concentration (0.211 lb PE/lb coating) and one minus the transfer efficiency multiplied by one minus the control efficiency $((1-0.94)(1-0.090)=0.006)$.

If required, the permittee shall demonstrate compliance using Methods 1 thru 5 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

k. Emission Limitation:

95% destructive efficiency and a minimum 72% capture efficiency for VOC emissions from the continuous motion printer and inside body spray.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 or 25A of 40 CFR Part 60 Appendix A and Method 204 through 204F of 40 CFR Part 51, Appendix M, using the methods and procedures specified in OAC rule 3745-21-10. The permittee may request to use an alternate method or procedure for the determination of capture efficiency in accordance with the US EPA'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 alternate if such approval does not contravene any other applicable requirement.)

g) Miscellaneous Requirements

- (1) The terms and conditions contained in this permit to install for emissions unit K010 shall supercede all requirements for emissions unit K010 contained in Permit to Install 04-01439 (issued 6/13/2006), PTI 04-01465 (issued 5/22/2007), and PTI P0104686 (issued 5/18/2009).



2. K011, Modified Can Manufacturing Line

Operations, Property and/or Equipment Description:

Modified beverage can production line #4 for 24 oz. size cans – consisting of can making equipment (cupper, body makers and trimmers), a continuous motion printer with a 2.75 mmBtu/hr oven and an interior body spray coater with 5.2 mmBtu/hr inside bake oven; the inside bake oven controlled with a 7.3 mmBtu/hr regenerative thermal oxidizer (RTO).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 71.60 tons per rolling, 12-month period from line 4.</p> <p>See b)(2)a. and c)(2).</p>
b.	OAC rule 3745-31-05(A)(3)	<p>VOC emissions shall not exceed 22.51 pounds per hour.</p> <p>See b)(2)c., b)(2)e. and b)(2)h.</p>
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g.
d.	OAC rule 3745-17-07(A)(1)	Visible Emissions (VE) from this emissions unit shall not exceed 20% opacity as a six minute average.
e.	OAC rule 3745-17-11(B)(1)	<p>Particulate emissions (PE) shall not exceed 0.551 pounds per hour.</p> <p>See b)(2)j.</p>
f.	OAC rule 3745-18-06(A)	See (2)i.
g.	OAC rule 3745-21-08(B)	See b)(2)d.
h.	40 CFR Part 60, Subpart WW	See b)(2)b. and (2)f.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
I	OAC rule 3745-21-09(D)	See b)(2)b.
j.	40 CFR Part 60 Subpart A	See b)(2)k.

(2) Additional Terms and Conditions

- a. The emissions of hazardous air pollutants (HAPs) from this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.
- b. The emission limitation established by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).
- c. The hourly and annual emission limitations for the bake ovens were established for PTI purposes to reflect the potential to emit for the combustion of natural gas in this emissions unit at the maximum burner heat input capacity. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- d. On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- e. Volatile organic compound (VOC) emissions from individual coatings shall not exceed the following:
 - inks: 1.81 pounds per gallon of coating excluding water and exempt solvents;
 - over varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;
 - 2.9 pounds per gallon of coating solids;
 - exterior bottom end varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;
 - 2.9 pounds per gallon of coating solids;
 - inside spray: 3.5 pounds per gallon of coating excluding water and exempt solvents; and
 - 6.8 pounds per gallon of coating solids.



- f. This emissions unit is subject to the applicable provisions of Subpart WW of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.
 - g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, NOx, SO₂, PE, and PM₁₀ emissions from this air contaminant source since the uncontrolled potential to emit for CO, NOx, SO₂, PE, and PM₁₀ emissions are less than 10 tons per year.
 - h. For the regenerative thermal oxidizer (RTO), the capture efficiency shall be a minimum of 72% and the destructive efficiency shall be a minimum of 95% for VOC emissions from the inside body spray oven.
 - i. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 BTU per standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
 - j. The inside body coating is the only coating sprayed and therefore is the only coating producing particulate emissions.
 - k. 40 CFR Part 60 Subpart A provides applicability, provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- c) Operational Restrictions
- (1) The permittee shall burn only natural gas as fuel in this emissions units.
 - (2) Coating material usage shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates:

Inside spray:	165,812 gallons;
Over varnish:	64,088 gallons;
Bottom varnish:	3,671 gallons; and
Inks:	6,404 gallons.
 - (3) The permittee shall not operate the body making equipment when the oil mist collection system is not in operation.



- (4) The individual HAP and total HAP, combined, emission rates for all emissions units at the facility shall not exceed 9.9 and 24.9 tons per year, respectively, based upon a rolling, 12-month summation of emission rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (2) The permittee shall maintain daily records that document any time periods when the oil mist collection system was not in service when the body making equipment was in operation.
 - (3) The permittee shall collect and record the following information each month for the line:
 - a. For the coatings:
 - i. the name and identification number of each coating (i.e., over varnish, bottom varnish or inside spray coating), as applied,
 - ii. the total volume of each coating for the month, in gallons;
 - iii. the VOC content of each coating, in pounds of VOC per gallon of coating,
 - iv. the VOC content of each coating, in pounds of VOC per gallon of coating excluding water and exempt solvents,
 - v. the VOC content of each coating, in pounds of VOC per gallon of solids, as applied,
 - vi. the monthly total VOC emissions from all coatings employed (excluding interior spray coating), $(ii) \times (iii) \div 2000$, in tons;
 - vii. the monthly total VOC emissions from interior spray coating, $[(ii) \times (iii) \times (1-TCE)] \div 2000$, in tons; (TCE = overall percentage total capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance).
 - b. For the inks:
 - i. the name and identification number of each ink, as applied,
 - ii. the volume (and mass) of each ink, in gallons (and pounds),
 - iii. the VOC content of each ink, in pounds of VOC per gallon (and pound) of ink,
 - iv. the VOC content of each ink, in pounds of VOC per gallon of coating excluding water and exempt solvents,
 - v. the monthly total VOC emissions from all inks employed, calculated on a volume (and mass) basis, $(ii) \times (iii) \div 2000$, in tons;



- c. the rolling 12-month summation of VOC emissions from all coatings and inks employed, in tons.
 - d. the rolling 12-month summation, of each type of coating employed in gallons.
 - e. the rolling 12-month summation, of all the types of ink employed in gallons.
- (4) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 0.75 percent of the temperature being measured or ± 4.5 degrees Fahrenheit (± 2.5 degrees Celcius), whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and calculate the average combustion temperature within the thermal incinerator, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:
- a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test (1616° F based on the emissions test performed on 7/8/08 for EU # K010 and K011) that demonstrated the emissions unit to be in compliance;
 - b. a log or record of the operating time for the capture (collection) system, thermal incinerator, monitoring equipment, and the associated emissions unit;
 - c. whenever the monitored value for the combustion temperature deviates from the range specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations; and
 - d. in response to each required investigation to determine the cause of the deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable combustion temperature specified above, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time of the deviation, the total period of time during which there was a deviation, the combustion temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.



- (5) The permittee shall maintain records of the facility's potential to emit for each individual hazardous air pollutant and the total of all hazardous air pollutants combined by maintaining a formal up-to-date HAP emissions inventory from all HAP emissions units at the facility. The permittee shall maintain a record including methods, procedures, and assumptions supporting the calculations.
- (6) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit as fuel. Each report shall be submitted within 30 days after the deviation occurs to the Toledo Division of Environmental Services.
- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the oil mist collector was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Division of Environmental Services) within 30 days after the event occurs.
- (3) The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of non-complying coatings or inks. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Division of Environmental Services) within 30 days following the end of the calendar month.



- (4) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all exceedances of the rolling, 12-month usage rate limitations specified under c)(2);
 - b. all exceedances of the rolling, 12-month emission limitation for VOC;
 - c. all exceedances of the rolling, 12-month emission limitations for individual HAP or any combination of HAPs;
 - d. identify all days during which any visible particulate emissions were observed from any stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions. If no visible emissions observed, then state no visible emissions occurred during that period.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (5) The permittee shall submit quarterly reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
 - a. each period of time when the combustion temperature was outside the acceptable range;
 - b. an identification of each incident of deviation described in d)(4) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in d)(4) where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in d)(4) where proper records were not maintained for the investigation and/or the corrective action.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (6) The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with b)(1) and (b)(2) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

Emissions from all emissions units at the facility shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.

Applicable Compliance Method:

The monitoring and record keeping requirement of d)(5) will be used to demonstrate compliance.

b. Emission Limitation:

71.60 tons of VOC per rolling, 12-month period for line 4.

Applicable Compliance Method:

A one-time calculation of the yearly (12-month) federally enforceable usage limitation emissions, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings:

[Sum of {(Gallons of coating applied per year)(weight % of solvent)(density of coating)(1-CE)} + sum of {(fuel usage rating)(5.5 lb/mm scf)(1-CE)}/(1020 mmBtu/mm scf)(2000 lb/ton)}/ (2000 lb/ton)

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

[(64,088 gal over varnish/yr)(0.112 lb VOC/lb overvarnish)(8.75 lb/gal)+(3671 gal bottom varnish/yr)(0.149 lb VOC/lb bottom varnish)(9.0 lb/gal)+(165,812 gal inside spray/yr)(0.144 lb VOC/lb inside spray)(8.43 lb/gal)(1-0.684)+(6404 gal ink/yr)(0.14 lb VOC/lb ink)(12.96 lb/gal) +(5.5 lb/mm scf)(2.75 mmBTU/hr)(8760 hr/yr)/(1020 mmBTU/mm scf)+(5.5 lb/mm scf)(5.20 mmBTU/hr)(8760 hr/yr)(1-0.684)/(1020 mmBTU/mm scf)}/(2000 lb/ton)

c. Emission Limitation:

22.51 pounds per hour of VOC.

Applicable Compliance Method:

A one-time calculation of the hourly potential to emit, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings with the inside spray operation controlled by the RTO:

Sum of [Gallons of coating applied per hour*weight % of solvent*density of coating*(1-CE)] + sum of [(fuel usage rating*5.5 lb/mm scf*(1-CE))/1020



mmBtu/mmscf] CE=0 for all coatings, inks, and other materials except inside spray and inside spray oven.

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

$(10.08 \text{ gal over varnish/hr})(0.112 \text{ lb VOC/lb overvarnish})(8.75 \text{ lb/gal}) + (0.58 \text{ gal bottom varnish/hr})(0.149 \text{ lb VOC/lb bottom varnish})(9.0 \text{ lb/gal}) + (26.08 \text{ gal inside spray/hr})(0.144 \text{ lb VOC/lb inside spray})(8.43 \text{ lb/gal})(1-0.684) + (1.01 \text{ gal ink/hr})(0.14 \text{ lb VOC/lb ink})(12.96 \text{ lb/gal}) + (5.5 \text{ lb/mmscf})(2.75 \text{ mmBTU/hr}) / (1020 \text{ mmBTU/mmscf}) + (5.5 \text{ lb/mmscf})(5.20 \text{ mmBTU/hr})(1-0.684) / (1020 \text{ mmBTU/mmscf})$

d. Emission Limitation:

VE shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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

e. Emission Limitation:

0.551 pound per hour PE

Applicable Compliance Method:

Compliance for the body making process shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coolant usage (1.25 gal/hr) by the coolant density (8.55 lb coating/gal coating), the solid concentration (0.55 lb PE/lb coating) and one minus the estimated oil mist collector efficiency (1-0.95).

To this amount will be added the inside spray particulate emissions, whose compliance shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coating usage (26.08 gal/hr) by the coating density (8.43 lb coating/gal coating), the solid concentration (0.211 lb PE/lb coating) and one minus the transfer efficiency multiplied by one minus the control efficiency $((1-0.94)(1-.090)=0.006)$.

If required, the permittee shall demonstrate compliance using Methods 1 thru 5 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission limitation:

inks: 1.81 pounds of VOC per gallon of coating excluding water and exempt solvents



Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

g. Emission limitation:

over varnish: 2.1 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

h. Emission limitation:

over varnish: 2.9 pounds of VOC per gallon of coating solids

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) and 40 CFR 60.496 using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a



particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

i. Emission limitation:

bottom varnish (exterior bottom end coating): 2.1 pounds of VOC per gallon of coating excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

j. Emission limitation:

bottom varnish (exterior bottom end coating): 2.9 pounds of VOC per gallon of coating solids.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) and 40 CFR 60.496 using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

k. Emission limitation:

inside spray: 3.5 pounds of VOC per gallon of coating excluding water and exempt solvents



Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

I. Emission limitation:

inside spray: 6.8 pounds of VOC per gallon of coating solids

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3). If required, compliance shall be demonstrated by an evaluation performed in accordance with 3745-21-10(B) and 40 CFR 60.496 using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A.

Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

m. Emission Limitation:

95% destructive efficiency and a minimum 72% capture efficiency for VOC emissions from the inside body spray.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 or 25A of 40 CFR Part 60 Appendix A and Method 204 through 204F of 40 CFR Part 51, Appendix M, using the methods and procedures specified in OAC rule 3745-21-10. The permittee may request to use an alternate method or procedure for the determination of capture efficiency in accordance with the US EPA'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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0105399

Facility ID: 0448002007

Effective Date: To be entered upon final issuance

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

g) Miscellaneous Requirements

- (1) The terms and conditions contained in this permit to install for emissions unit K011 shall supercede all requirements for emissions unit K011 contained in Permit to Install 04-01429 (issued 10/19/2006), PTI 04-01465 (issued 5/22/07), and PTI P0104686 (issued 5/18/2009).



3. K012, Can Manufacturing Line

Operations, Property and/or Equipment Description:

Modified beverage can production line #2 for 8 oz. and 12 oz. size sleek and regular cans – consisting of can making equipment (cupper, body makers and trimmers), a continuous motion basecoater with a 3.00 mmBtu/hr basecoater oven; continuous motion printer with 2.75 mmBtu/hr continuous motion printer oven and an interior body sprayer with a 5.70 mmBtu/hr inside bake oven; all controlled with a regenerative thermal oxidizer (RTO)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 41.32 tons per rolling, 12-month period.</p> <p>See b)(2)b. and c)(3)</p>
b.	OAC rule 3745-31-05(A)(3)	<p>VOC emissions shall not exceed 12.38 pounds per hour.</p> <p>See b)(2)a. (2)c. and (2)d.</p>
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)e.
d.	OAC rule 3745-17-07(A)(1)	Visible emissions from stacks this emissions unit shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
e.	OAC rule 3745-17-11(B)(1)	<p>Particulate emissions (PE) shall not exceed 0.551 pound per hour.</p> <p>See b)(2)f.</p>
f.	OAC rule 3745-18-06(A)	See b)(2)g.
g.	40 CFR Part 60, Subpart WW	See b)(2)h. and (2)i.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-21-08(B)	See b)(2)j.
i.	OAC rule 3745-21-09(D)(1)	See b)(2)h.
j.	40 CFR Part 60 Subpart A	See b)(2)k.

(2) Additional Terms and Conditions

- a. For the regenerative thermal oxidizer (RTO), the capture efficiency shall be a minimum of 72% and the destructive efficiency shall be a minimum of 95% for VOC emissions from the coatings and inks.
- b. The emissions of hazardous air pollutants (HAPs) from this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.
- c. The hourly and annual emission limitation for the bake ovens were established for PTI purposes to reflect the potential to emit for the combustion of natural gas in this emissions unit at the maximum burner heat input capacity of 3.0 mmBtu per hour for the continuous motion base coat oven, 2.75 mmBtu per hour for the continuous motion printer oven, and 5.70 mmBtu per hour for the inside spray oven. Therefore, it is not necessary to develop monitoring, record keeping, and/or reporting requirements to ensure compliance with these limitations.
- d. Volatile organic compound (VOC) emissions from individual coatings shall not exceed the following:
 - inks: 1.81 pounds per gallon of coating excluding water and exempt solvents;
 - basecoat: 1.8 pounds per gallon of coating excluding water and exempt solvents;
2.4 pounds per gallon of coating solids;
 - over varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;
2.9 pounds per gallon of coating solids;
 - exterior bottom end varnish: 2.1 pounds per gallon of coating excluding water and exempt solvents;
2.9 pounds per gallon of coating solids;



inside spray: 3.5 pounds per gallon of coating excluding water and exempt solvents;

6.8 pounds per gallon of coating solids; and

- e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂, NO_x, PE, PM₁₀, and CO emissions from this air contaminant source since the uncontrolled potential to emit for SO₂, NO_x, PE, PM₁₀ and CO is less than 10 tons per year.
- f. The inside body coating is the only coating sprayed and therefore is the only coating producing particulate emissions.
- g. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- h. The emission limitation established by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).
- i. This emissions unit is subject to the applicable provisions of Subpart WW of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.
- j. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by the design of the emissions unit and the technology associated with the current operating practices.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- k. 40 CFR Part 60 Subpart A provides applicability, provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.



c) Operational Restrictions

- (1) The permittee shall burn only natural gas as fuel in these emissions units.
- (2) Coating and ink usage in this emissions unit shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates:

Base coat:	35,597 gallons;
Over varnish:	64,335 gallons;
Bottom varnish:	2,885 gallons;
Inside spray:	124,021 gallons; and
Inks:	4,363 gallons.
- (3) The individual HAP and total HAP, combined, emission rates for all emissions units at the facility shall not exceed 9.9 and 24.9 tons per year, respectively, based upon a rolling, 12-month summation of emission rates.
- (4) The permittee shall not operate the body making equipment when the oil mist collection system is not in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas as fuel in these emissions units.
- (2) The permittee shall collect and record the following information each month for the line:
 - a. For the coatings:
 - i. the name and identification number of each coating (i.e., over varnish, bottom varnish, inside spray coating, or basecoat coating), as applied;
 - ii. the volume of each coating employed, in gallons;
 - iii. the VOC content of each coating, in pounds of VOC per gallon of coating;
 - iv. the VOC content of each coating, in pounds of VOC per gallon of coating excluding water and exempt solvents;
 - v. the VOC content of each coating, in pounds of VOC per gallon of solids, as applied; and
 - vi. the monthly total VOC emissions from all coatings employed, $[(ii) \times (iii) \times (1-CE)] \div 2000$, in tons; (CE = overall percentage capture & control efficiency of the RTO as determined during the most recent emissions test that demonstrated compliance).
 - b. For the inks:
 - i. the name and identification number of each ink, as applied;



- ii. the volume (and mass) of each ink employed, in gallons (and pounds);
 - iii. the VOC content of each ink, in pounds of VOC per gallon (and pounds) of ink;
 - iv. the VOC content of each ink, in pounds of VOC per gallon of ink excluding water and exempt solvents; and
 - v. the monthly total VOC emissions from all inks employed, calculated on a volume (and mass) basis, $[(ii) \times (iii) \times (1-CE)] \div 2000$, in tons; (CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance).
- c. the rolling 12-month summation of VOC emissions from all coatings and inks employed, in tons.
 - d. the rolling 12-month summation, of each type of coating employed in gallons.
 - e. the rolling 12-month summation, of all the types of ink employed in gallons (and pounds).
- (3) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 0.75 percent of the temperature being measured or ± 4.5 degrees Fahrenheit (± 2.5 degrees Celcius), whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and calculate the average combustion temperature within the thermal incinerator, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:
- a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance;
 - b. a log or record of the operating time for the capture (collection) system, thermal incinerator, monitoring equipment, and the associated emissions unit;
 - c. whenever the monitored value for the combustion temperature deviates from the range specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations; and
 - d. in response to each required investigation to determine the cause of the deviation, the permittee shall take prompt corrective action to bring the operation



of the control equipment within the acceptable combustion temperature specified above, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time of the deviation, the total period of time during which there was a deviation, the combustion temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The permittee shall maintain records of the facility's 12 month rolling total emissions of each individual hazardous air pollutant and the total of all hazardous air pollutants combined by maintaining a formal up-to-date HAP emissions inventory from all HAP emissions units at the facility. The permittee shall maintain a record including methods, procedures, and assumptions supporting the calculations.
- (6) The permittee shall maintain daily records that document any time periods when the oil mist collection system was not in service when the body making equipment was in operation.



e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all exceedances of the rolling, 12-month usage rate limitations for coatings specified under c)(2);
 - b. all exceedances of the rolling, 12-month emission limitation for VOC;
 - c. all exceedances of the rolling, 12-month emission limitations for individual HAP or any combination of HAPs;
 - d. all days during which any visible particulate emissions were observed from any stack serving this emissions unit; and
 - e. describe any corrective actions taken to eliminate the visible particulate emissions. If no visible emissions observed, then submit a report which states no visible emissions occurred during that period.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
 - a. each period of time when the combustion temperature was outside the acceptable range;
 - b. an identification of each incident of deviation described in (4)a. where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (4)a. where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. and identification of each incident of deviation described in (4)a. where proper records were not maintained for the investigation and/or the corrective action.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have



occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (5) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the oil mist collector was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Division of Environmental Services) within 30 days after the event occurs.
- (6) The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Emissions from all emissions units at the facility shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs.

Applicable Compliance Method:

The monitoring and record keeping requirements of d)(5) will be used to demonstrate compliance.

b. Emission Limitation:

41.32 tons of VOC per rolling, 12-month period for Line 2.

Applicable Compliance Method:

A one-time calculation of the yearly (12-month) federally enforceable usage limitation emissions, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings:

$$[\text{Sum of } \{(\text{Gallons of coating applied per year})(\text{weight \% of solvent})(\text{density of coating})(1-\text{CE})\} + \text{sum of } \{(\text{fuel usage rating})(5.5 \text{ lb/mmscf})(1-\text{CE})\}/(1020 \text{ mmBtu/mmscf})(2000 \text{ lb/ton})]/ (2000 \text{ lb/ton})$$

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

$$[(35,597 \text{ gal base coat/yr})(0.088 \text{ lb VOC/lb base coat})(11.0 \text{ lb/gal})(1-0.684)+(64,335 \text{ gal over varnish/yr})(0.112 \text{ lb VOC/lb overvarnish})(8.75 \text{ lb/gal})(1-0.684)+(2885 \text{ gal bottom varnish/yr})(0.149 \text{ lb VOC/lb bottom varnish})(9.0 \text{ lb/gal})(1-0.684)+(124,021 \text{ gal inside spray/yr})(0.144 \text{ lb VOC/lb inside spray})(8.43 \text{ lb/gal})(1-0.684)+(4363 \text{ gal ink/yr})(0.14 \text{ lb VOC/lb ink})(12.96 \text{ lb/gal})(1-0.684)+(5.5$$



$$\begin{aligned} & \text{lb/mmscf})(3.00 \text{ mmBTU/hr})(8760 \text{ hr/yr})(1-0.684)/(1020 \text{ mmBTU/mmscf})+(5.5 \\ & \text{lb/mmscf})(2.75 \text{ mmBTU/hr})(8760 \text{ hr/yr})(1-0.684)/(1020 \text{ mmBTU/mmscf})]/(2000 \\ & \text{lb/ton)+ (5.5 lb/mmscf)(5.70 mmBTU/hr)(8760 hr/yr)(1-0.684)/(1020} \\ & \text{mmBTU/mmscf})]/(2000 \text{ lb/ton)} \end{aligned}$$

c. Emission Limitation:

12.38 pounds of VOC per hour.

Applicable Compliance Method:

A one-time calculation of the hourly potential to emit, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

This emissions limitation shall be demonstrated as the summation of the VOC emissions for the combustion of natural gas and the VOC emissions from all coatings:

Sum of [(Gallons of coating applied per hour)(weight % of solvent)(density of coating)(1-CE)] + sum of [(fuel usage rating)(5.5 lb/mmscf)(1-CE))/(1020 mmBtu/mmscf)]

CE = overall percentage capture & control efficiency of the RTO, as determined during the most recent emissions test that demonstrated compliance.

(5.75 gal base coat/hr)(0.088 lb VOC/lb base coat)(11.0 lb/gal)(1-0.684)+ (9.43 gal over varnish/hr)(0.112 lb VOC/lb overvarnish)(8.75 lb/gal)(1-0.684)+ (0.43 gal bottom varnish/hr)(0.149 lb VOC/lb bottom varnish)(9.0 lb/gal)(1-0.684)+(18.39 gal inside spray/hr)(0.144 lb VOC/lb inside spray)(8.43 lb/gal)(1-0.684)+(0.71 gal ink/hr)(0.14 lb VOC/lb ink)(12.96 lb/gal)(1-0.684)+(5.5 lb/mmscf)(3.00 mmBTU/hr)(1-0.684)/(1020 mmBTU/mmscf)+(5.5 lb/mmscf)(2.75 mmBTU/hr)(1-0.684)/(1020 mmBTU/mmscf) +(5.5 lb/mmscf)(5.70 mmBTU/hr)(1-0.684)/(1020 mmBTU/mmscf)

If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission limitation:

1.8 pounds of VOC per gallon of coating (minus water and exempt solvents) for the continuous motion base coat coating line.

Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee



determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

e. Emission limitation:

2.40 pound of VOC per gallon of coating solids for the continuous motion base coat coating line.

Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

f. Emission Limitation:

VE shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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

g. Emission Limitation:

2.1 pounds of VOC per gallon of coating (excluding water and exempt solvents) for over varnish and exterior bottom end varnish.

Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use



formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

h. Emission Limitation:

2.9 pounds of VOC per gallon of coating solids for over varnish and exterior bottom end varnish.

Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

i. Emission limitation:

1.81 pounds of VOC per gallon of coating (excluding water and exempt solvents) for inks.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(2). If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule(s) 3745-21-09(B)(3)(f) and 3745-21-10(B) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the US EPA and shall use formulation data for that coating to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

j. Emission Limitation:

3.5 pounds of VOC per gallon of coating (excluding water and exempt solvents) for the interior body coating line, line 2 can body sprayers.



Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services. If the permittee determines that Method 24 has not been used for a particular coating, the permittee shall request that the coating supplier perform Method 24 on the coating in question. If the supplier determines that Method 24 cannot be used, the permittee shall so notify the Administrator of the US EPA and pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, will request that the supplier use formulation data to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24.

k. Emission Limitation:

6.8 pounds of VOC per gallon of coating solids for the Interior Body Coating, line 2 can body sprayers.

Applicable Compliance Method:

The monitoring and record keeping requirements in d)(2) will be used to demonstrate compliance. If required, compliance shall be demonstrated by an evaluation performed in accordance with OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5) using the methods and procedures specified in US EPA Reference Method 24 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be based upon approval by the Toledo Division of Environmental Services. If the permittee determines that Method 24 has not been used for a particular coating, the permittee shall request that the coating supplier perform Method 24 on the coating in question. If the supplier determines that Method 24 cannot be used, the permittee shall so notify the Administrator of the US EPA and pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, will request that the supplier use formulation data to demonstrate compliance until the US EPA provides alternative analytical procedures or alternative precision statements for Method 24.

l. Emission Limitation:

0.551 pound per hour PE from the inside body spray

Applicable Compliance Method:

Compliance for the body making process shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coolant usage (1.25 gal/hr) by the coolant density (8.55 lb coating/gal coating), the solid concentration (0.55 lb PE/lb coating) and one minus the estimated oil mist collector efficiency (1-0.95).



To this amount will be added the inside spray particulate emissions, whose compliance shall be demonstrated by a worst case emissions calculation as follows: multiplying the maximum coating usage (18.39 gal/hr) by the coating density (8.43 lb coating/gal coating), the solid concentration (0.211 lb PE/lb coating) and one minus the transfer efficiency multiplied by one minus the control efficiency $((1-0.94)(1-0.090)=0.006)$.

If required, the permittee shall demonstrate compliance using Methods 1 thru 5 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

m. Emission Limitation:

95% destructive efficiency and a minimum 72% capture efficiency for VOC emissions from the inside body spray.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 or 25A of 40 CFR Part 60 Appendix A and Method 204 through 204F of 40 CFR Part 51, Appendix M, using the methods and procedures specified in OAC rule 3745-21-10. The permittee may request to use an alternate method or procedure for the determination of capture efficiency in accordance with the US EPA'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 alternate if such approval does not contravene any other applicable requirement.).

g) Miscellaneous Requirements

- (1) The terms and conditions contained in this permit to install for emissions unit K012 shall supercede all requirements for emissions unit K012 contained in Permit to Install 04-01473 (issued 8/2/2007) and PTI P0104696 (issued 5/18/2009).



4. K015, Clean-up Operation

Operations, Property and/or Equipment Description:

Clean-up operation facility wide

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)a.
b.	OAC rule 3745-31-05(D)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 6.55 tons per rolling, 12-month period.</p> <p>See b)(2)a.</p>

(2) Additional Terms and Conditions

a. Permit to Install P0105177 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. clean-up material usage shall not exceed 2,000 gallons per rolling, 12-month period;

ii. VOC emissions shall not exceed 6.55 pounds of VOC per gallon; and

iii. Clean-up solvent shall not contain HAP.

c) Operational Restrictions

(1) Clean-up material usage shall not exceed 2,000 gallons per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for the clean-up solvent:

a. The name and identification number of each clean-up material employed;



- b. The volume of each clean-up material employed, in gallons;
- c. The VOC content of each clean-up material employed, in pounds of VOC per gallon;
- d. an identification of whether or not each cleanup material employed contains HAP;
- e. The monthly total VOC emissions from all clean-up materials employed, [(b.) x (c.)] /2000, in tons;
- f. The rolling, 12-month summation of VOC emissions from all clean-up materials employed;
- g. The rolling, 12-month summation of clean-up materials employed, in gallons;

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. All exceedances of the VOC emissions limit of 6.55 pounds of VOC per gallon.
 - b. All exceedances of the rolling, 12-month usage rate limitation for cleanup materials specified under c)(1);
 - c. All exceedances of the rolling, 12-month emission limitation for VOC; and
 - d. any day in which a HAP-containing cleanup material was employed and the individual HAP emissions for each such day.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year to the Toledo Division of Environmental Services and shall address the data obtained during the previous calendar period. If no deviations (excursions) have occurred, the permittee shall submit a quarterly report which states that no deviations (excursions) have occurred during the previous quarter.

- (2) The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Clean-up solvent: 6.55 pounds of VOC per gallon

Applicable Compliance Method:

The permittee shall determine the VOC content of the clean-up solvent from manufacturer's formulation data. The monitoring and record keeping requirement in d)(1) will be used to demonstrate compliance.



b. Emission Limitation:

6.55 tons of VOC per rolling, 12-month period for this emissions unit

Applicable Compliance Method:

A one-time calculation of the federally enforceable usage limitation emissions, based upon the worst case operating scenario, shall be used to demonstrate compliance with this limitation.

$(\text{material usage in gallons per year})(\text{weight \% of solvent})/(2000 \text{ lb/ton})$

$(2000 \text{ gal/yr})(6.55 \text{ lb VOC/gal})/(2000 \text{ lb/ton})$

g) Miscellaneous Requirements

(1) None.