

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for the **Phoenix Packaging Company, Warner Plant**, located in **STARK** County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K015	Line 601, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98) BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period
K016	Line 601, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98) Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined Per rolling, 365 day period: 588 gal. of lubricant; 382 gal. of rust inhibitor; and 1,529 gal. of repair coat 2.39 tons VOC/rolling, 365 day period
K017	Line 602, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98) BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K018	Line 602, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(I) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 12,432 gal/rolling, 365 day period of repair coat 1.06 tons VOC/rolling, 365 day period
K019	Line 602, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined Per rolling, 365 day period: 588 gal of lubricant; 319 gal. of rust inhibitor; and 1,277 gal. of repair coat 2.26 tons VOC/rolling, 365 day period
K020	Line 603, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit. Compliance with Ohio EPA "Air Toxics Policy".	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 3.61 lbs VOC/gallon of coating, excluding water and exempt solvents 12,096 gal/rolling, 365 day period of end seal compound 22.38 tons VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K021	Line 603, wipe application of lubricant and rust inhibitor to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined 1176 gal/rolling, 365 day period of lubricant; and 445 gal/rolling, 365 day period of rust inhibitor 4.67 tons VOC/rolling, 365 day period
K022	Line 604, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period
K023	Line 604, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(i) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 8,285 gal/rolling, 365 day period of repair coat 0.70 ton VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K024	Line 604, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined Per rolling, 365 day period: 588 gal. of lubricant; 292 gal. of rust inhibitor; and 1,168 gal. of repair coat 2.20 tons VOC/rolling, 365 day period
K025	Line 605, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit. Compliance with Ohio EPA "Air Toxics Policy".	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 3.61 lbs VOC/gallon of coating, excluding water and exempt solvents Per rolling, 365 day period: 7245 gal of end seal compound, and 851 gal of cleanup material (5.6 lbs VOC/gal) 15.78 tons VOC/rolling, 365 day period
K026	Line 605, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(i) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 15,698 gal/rolling, 365 day period of repair coat 1.33 ton VOC/rolling, 365 day period

<u>Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>	
K027	Line 605, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined
			OAC 3745-31-05 (4/27/98)	Per rolling, 365 day period: 588 gal. of lubricant; 342 gal. of rust inhibitor; and 1,369 gal. of repair coat 2.30 tons VOC/rolling, 365 day period
K028	Line 606, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit. Compliance with Ohio EPA "Air Toxics Policy".	OAC 3745-21-09(D) (1/17/95)	BAT is more stringent
			OAC 3745-31-05 (4/27/98)	3.61 lbs VOC/gallon of coating, excluding water and exempt solvents Per rolling, 365 day period: 6048 gal of end seal compound, and 851 gal of cleanup material (5.6 lbs VOC/gal) 13.57 tons VOC/rolling, 365 day period
K029	Line 606, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(i) (1/17/95)	BAT is more stringent
			OAC 3745-31-05 (4/27/98)	2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 8285 gal/rolling, 365 day period of repair coat 0.70 ton VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K030	Line 606, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined Per rolling, 365 day period: 588 gal. of lubricant; 292 gal. of rust inhibitor; and 1,168 gal. of repair coat 2.20 tons VOC/rolling, 365 day period
K031	Line 607, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit. Compliance with Ohio EPA "Air Toxics Policy".	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 3.61 lbs VOC/gallon of coating, excluding water and exempt solvents Per rolling, 365 day period: 6531 gal of end seal compound, and 851 gal of cleanup material (5.6 lbs VOC/gal) 14.46 tons VOC/rolling, 365 day period
K032	Line 607, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(i) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 12,432 gal/rolling, 365 day period of repair coat 1.06 ton VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K033	Line 607, wipe application of lubricant, rust inhibitor, and repair coat to unconverted can ends for tab attachment in conversion press. (existing modified)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(2)(e)(ii) (1/17/95) OAC 3745-31-05 (4/27/98)	Use of less than 10 gal/day of lubricant, rust inhibitor, and repair coat combined Per rolling, 365 day period: 588 gal. of lubricant; 319 gal. of rust inhibitor; and 1,277 gal. of repair coat 2.26 tons VOC/rolling, 365 day period
K034	Line 608, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period
K035	Line 608, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(i) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 12,432 gal/rolling, 365 day period of repair coat 1.06 ton VOC/rolling, 365 day period

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K036	Line 609, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period
K037	Line 609, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(U)(1)(I) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 12,432 gal/rolling, 365 day period of repair coat 1.06 ton VOC/rolling, 365 day period
K038	Line 610, air gun spray application of an end seal compound to the inner lip seal of unfinished 2- and 3-piece can ends. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21-09(D) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 0.00 lb VOC/gallon of coating, excluding water and exempt solvents 244 gal/rolling, 365 day period of cleanup material 0.80 ton VOC/rolling, 365 day period

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
K039	Line 610, electrolytic dip application of repair coat material to converted can ends with convection oven operating at 425° F. (New)	Compliance with the applicable OAC regulations and the terms and conditions of this permit.	OAC 3745-21- 09(U)(1)(i) (1/17/95) OAC 3745-31-05 (4/27/98)	BAT is more stringent 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents 15,698 gal/rolling, 365 day period of repair coat 1.33 tons VOC/rolling, 365 day period

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons / Year</u>
volatile organic compounds	97.65
combined HAPs	24.0
any single HAP	9.0

Note: The information contained under the Summary of Emissions section of the Permit to Install is for informational purposes only and is not enforceable.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

I. Emissions Units K015; K017; K022; K034; K036; and K038 (The following conditions apply per emissions unit unless otherwise specified below)

**A. Operational Restrictions
(K015; K017; K022; K034; K036; and K038)**

1. Only coatings which comply with the allowable emission limit established in accordance with BAT - 0.00 lb VOC/gal of coating, excluding water and exempt solvents - shall be used in this emissions unit.
2. The maximum annual amount of cleanup material used shall not exceed 244 gallons, based upon a rolling 365-day summation of the amount of cleanup material used each day. The VOC content of the cleanup material shall not exceed 6.6 lbs/gal. Other materials may used if approved by the Canton City Health Department, Air Pollution Control Division prior to initial use.

**B. Monitoring and/or Recordkeeping Requirements
(K015; K017; K022; K034; K036; and K038)**

1. The permittee shall collect and record the following information each day for the emissions unit:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the VOC content, in pounds of VOC per gallon, of each coating (excluding water and exempt solvents), as applied;
 - c. the VOC content, in pounds of VOC per gallon, of each coating, as applied;
 - d. the individual HAP content for each HAP of each coating and cleanup material employed, in pounds of individual HAP per gallon of

- coating and/or cleanup material, as applied;
- e. the number of gallons of each coating employed;
 - f. the total VOC emissions from all coatings employed, in pounds or tons;
 - g. the number of gallons of cleanup material employed;
 - h. the rolling, 365-day summation of the gallons of cleanup material employed;
 - i. the VOC content of the cleanup material;
 - i. the total VOC emissions from the cleanup material employed, in pounds/day;
 - j. the rolling, 365-day summation of VOC emissions, in tons/year;
 - k. the total HAP emissions, both single and combined, from each coating and cleanup material employed, in pounds/day; and
 - l. the rolling, 365-day summation of HAP emissions, both single and combined, in tons/year.

If the permittee mixes complying coatings at the line, it is not necessary to record the VOC content of the resulting mixture.

**C. Reporting Requirements
(K015; K017; K022; K034; K036; and K038)**

1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division (CCHDAPCD) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.
2. The permittee shall notify the CCHDAPCD in writing of any exceedance of the 244 gal of cleanup/rolling, 365 day period. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.

**D. Compliance Methods and Emission Testing Requirements
(K015; K017; K022; K034; K036; and K038)**

1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation

0.00 lb VOC/gallon of coating, excluding water and exempt solvents

Applicable Compliance Method

Formulation data or Method 24 of 40 CFR Part 60, Appendix A.

- b. Emission Limitation

0.80 ton/rolling, 365 day period of volatile organic compounds

Applicable Compliance Method

Emissions are due to the use of cleanup material. Therefore, maintain records of the rolling, 365 day summation of the gallons of cleanup material used. Calculate the VOC emissions using the VOC content (in lbs/gal) of the cleanup material. Recordkeeping and reporting per Conditions I.B and I.C above.

E. Miscellaneous Requirements

(K015; K017; K022; K034; K036; and K038)

1. The following terms and conditions shall supersede all of the air pollution control requirements contained in the permit to install (application number 15-640) issued for these emissions units on April 10, 1991: I.A, I.B, I.C, and I.D.

II. Emissions Units K020; K025; K028; and K031 (The following conditions apply per emissions unit unless otherwise specified below)

A. Operational Restrictions

(K020; K025; K028; and K031)

1. Only coatings which comply with the allowable emission limit established in accordance with BAT - 3.61 lbs VOC/gal of coating, excluding water and exempt solvents - shall be used in this emissions unit.
2. The maximum annual amount (in gallons/year) of coating used shall not exceed the following, based

upon a rolling 365-day summation of the amount of coating used each day:

Emissions Unit	coating (gal/yr)
K020	12,096
K025	7,245
K028	6,048
K031	6,531

3. The maximum annual cleanup material used for K025, K028, and K031 shall not exceed 851 gallons (for each emissions unit), based upon a rolling 365-day summation of the amount of cleanup material used each day. The VOC content of the cleanup material shall not exceed 5.6 lbs/gal. Other materials may be used if approved by the Canton City Health Department, Air Pollution Control Division prior to initial use.

**B. Monitoring and/or Recordkeeping Requirements
(K020; K025; K028; and K031)**

1. The permittee shall collect and record the following information each day for the emissions unit:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the VOC content, in pounds of VOC per gallon, of each coating (excluding water and exempt solvents), as applied;
 - c. the VOC content, in pounds of VOC per gallon, of each coating, as applied;
 - d. the individual HAP content for each HAP of each coating and cleanup material, in pounds of HAPs per gallon of coating or cleanup material, as applied;
 - e. the number of gallons of each coating employed per day;
 - f. the rolling, 365-day summation of the amount of coatings employed, in gallons per year;
 - g. the total VOC emissions from all coatings employed, in pounds or tons per day;
 - h. the rolling, 365-day summation of the VOC

emissions from the coatings employed, in tons per year;

- i. the number of gallons of cleanup material employed per day;
- j. the rolling, 365-day summation of the gallons of cleanup material employed per year;
- k. the VOC content of the cleanup material;
- l. the total VOC emissions from the cleanup material employed, in pounds/day; and
- m. the rolling, 365-day summation of VOC emissions from the cleanup material, in tons/year.
- n. the total HAP emissions, both single and combined, from all coatings and cleanup material employed, in pounds or tons per day;
- o. the rolling, 365-day summation of the HAP emissions, both single and combined, from the coatings employed, in tons per year;

If the permittee mixes complying coatings at the line, it is not necessary to record the VOC content of the resulting mixture.

**C. Reporting Requirements
(K020; K025; K028; and K031)**

1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division (CCHDAPCD) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.
2. The permittee shall notify the CCHDAPCD in writing of any exceedance of the rolling, 365 day coating usage limitations denoted in Condition A.2. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.
3. For emissions units K025, K028, and K031, the permittee shall notify the CCHDAPCD in writing of any exceedance of the 851 gal of cleanup/rolling, 365 day period. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.

**D. Compliance Methods and Emission Testing Requirements
(K020; K025; K028; and K031)**

1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:

a. Emission Limitation

3.61 lbs VOC/gallon of coating, excluding water and exempt solvents

Applicable Compliance Method

Formulation data or Method 24 of 40 CFR Part 60, Appendix A.

b. Emission Limitation

tons VOC/rolling, 365-day period

Emissions Unit	VOCs (tpy)
K020	22.38
K025	15.78
K028	13.57
K031	14.46

Applicable Compliance Method

Maintain records of the rolling, 365 day summation of the gallons of coating and cleanup material used. Calculate the VOC emissions using the corresponding VOC contents (in lbs/gal) of the coating and cleanup materials employed and divide by 2000 lbs/ton. Calculate the HAP emissions using the HAP content (in lbs/gal) of each coating and cleanup material employed and divide by 2000 lbs/ton. Recordkeeping and reporting per Conditions II.B and II.C above.

**E. Miscellaneous Requirements
(K020; K025; K028; and K031)**

1. The following terms and conditions shall supersede all of the air pollution control requirements contained in the permit to install (application number 15-640) issued for these emissions units on April 10, 1991: II.A, II.B, II.C, and II.D.

III. Emissions Units K016; K019; K021; K024; K027; K030; and K033 (The following conditions apply per emissions unit unless otherwise specified below)

**A. Operational Restrictions
(K016; K019; K021; K024; K027; K030; and K033)**

2. The maximum daily coating usage shall not exceed 10 gallons per day combined for the rust inhibitor, lubricant, and repair coat employed.
3. The maximum annual amount (in gallons/year) of coating used shall not exceed the following, based upon a rolling 365-day summation of the amount of coating used each day:

Emissions Unit	Lubricant (gal/yr)	Rust Inhibitor (gal/yr)	Repair Coat (gal/yr)
K016	588	382	1,529
K019	588	319	1,277
K021	1176	445	NA
K024	588	292	1,168
K027	588	342	1,369
K030	588	292	1,168
K033	588	319	1,277

**B. Monitoring and/or Recordkeeping Requirements
(K016; K019; K021; K024; K027; K030; and K033)**

1. The permittee shall collect and record the following information each day for the emissions unit:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the VOC content, in pounds of VOC per gallon, of each coating, as applied;
 - c. the individual HAP content for each HAP of each coating employed, in pounds of individual HAP per gallon of coating, as applied;
 - d. the number of gallons of each coating employed per day;

- e. the rolling, 365-day summation of the amount of each coating employed, in gallons per year;
- f. the total VOC emissions from all coatings employed, in pounds or tons per day;
- g. the rolling, 365-day summation of the VOC emissions, in tons per year;
- h. the total HAP emissions, both single and combined, from each coating employed, in pounds/day; and
- i. the rolling, 365-day summation of HAP emissions, both single and combined, in tons/year.

C. Reporting Requirements

(K016; K019; K021; K024; K027; K030; and K033)

- 1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division (CCHDAPCD) in writing of any daily record showing the use of more than ten gallons of lubricant, rust inhibitor, and repair coat combined. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.
- 2. The permittee shall notify the CCHDAPCD in writing of any exceedance of the rolling, 365 day coating usage limitations denoted in Condition A.2. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.

D. Compliance Methods and Emission Testing Requirements

(K016; K019; K021; K024; K027; K030; and K033)

- 1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:
 - a. Coating Usage Limitation

Use of less than 10 gallons per day of lubricant, rust inhibitor, and repair coat combined.

Applicable Compliance Method

Recordkeeping and reporting per Conditions III.B and III.C above.

b. Emission Limitation

tons VOC/rolling, 365 day period

Emissions Unit	VOCs (tpy)
K016	2.39
K019	2.26
K021	4.67
K024	2.20
K027	2.30
K030	2.20
K033	2.26

Applicable Compliance Method

Maintain records of the rolling, 365 day summation of the gallons of each coating used. Calculate the VOC emissions using the corresponding VOC contents (in lbs/gal) of the coating employed and divide by 2000 lbs/ton. Recordkeeping and reporting per Conditions III.B and III.C above.

E. Miscellaneous Requirements

(K016; K019; K021; K024; K027; K030; and K033)

1. The following terms and conditions shall supersede all of the air pollution control requirements contained in the permit to install (application number 15-640) issued for these emissions units on April 10, 1991: III.A, III.B, III.C, and III.D.

IV. Emissions Units K018; K023; K026; K029; K032; K035; K037; and K039 (The following conditions apply per emissions unit unless otherwise specified below)

A. Operational Restrictions

(K018; K023; K026; K029; K032; K035; K037; and K039)

1. Only coatings which comply with the allowable emission limit established in accordance with BAT - 2.97 lbs VOC/gal of coating, excluding water and exempt solvents - shall be used in this emissions unit.

2. The maximum annual amount (in gallons/year) of coating used shall not exceed the following, based upon a rolling 365-day summation of the amount of coating used each day:

Emissions Unit	coating (gal/yr)
K018	12,432
K023	8,285
K026	15,698
K029	8,285
K032	12,432
K035	12,432
K037	12,432
K039	15,698

**B. Monitoring and/or Recordkeeping Requirements
(K018; K023; K026; K029; K032; K035; K037; and K039)**

1. The permittee shall collect and record the following information each day for the emissions unit:
- the name and identification number of each coating and cleanup material, as applied;
 - the VOC content, in pounds of VOC per gallon, of each coating (excluding water and exempt solvents), as applied;
 - the VOC content, in pounds of VOC per gallon, of each coating, as applied;
 - the individual HAP content for each HAP of each coating employed, in pounds of individual HAP per gallon of coating, as applied;
 - the number of gallons of each coating employed per day;
 - the rolling, 365-day summation of the amount of coatings employed, in gallons per year;
 - the total VOC emissions from all coatings employed, in pounds or tons per day;
 - the rolling, 365-day summation of the VOC

emissions from the coatings employed, in tons per year;

- i. the total HAP emissions, both single and combined, from each coating employed, in pounds/day; and
- j. the rolling, 365-day summation of HAP emissions, both single and combined, in tons/year.

If the permittee mixes complying coatings at the line, it is not necessary to record the VOC content of the resulting mixture.

C. Reporting Requirements

(K018; K023; K026; K029; K032; K035; K037; and K039)

1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division (CCHDAPCD) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.
2. The permittee shall notify the CCHDAPCD in writing of any exceedance of the rolling, 365 day coating usage limitations denoted in Condition A.2. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.

D. Compliance Methods and Emission Testing Requirements

(K018; K023; K026; K029; K032; K035; K037; and K039)

1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:

a. Emission Limitation

2.97 lbs VOC/gallon of coating, excluding water and exempt solvents

Applicable Compliance Method

Formulation data or Method 24 of 40 CFR Part 60, Appendix A.

b. Emission Limitation

tons VOC/rolling, 365 day period

Emissions Unit	VOCs (tpy)
K018	1.06
K023	0.70
K026	1.33
K029	0.70
K032	1.06
K035	1.06
K037	1.06
K039	1.33

Applicable Compliance Method

Maintain records of the rolling, 365 day summation of the gallons of coating employed. Calculate the VOC emissions using the corresponding VOC contents (in lbs/gal) of the coatings employed and divide by 2000 lbs/ton. Recordkeeping and reporting per Conditions IV.B and IV.C above.

E. Miscellaneous Requirements

(K018; K023; K026; K029; K032; K035; K037; and K039)

1. The following terms and conditions shall supersede all of the air pollution control requirements contained in the permit to install (application number 15-640) issued for these emissions units on April 10, 1991: IV.A, IV.B, IV.C, and IV.D.

V. General Facility Wide Conditions

A. Operational Restrictions

1. The combined annual emissions from the entire facility (K015 through K036) shall not exceed 97.65 tpy VOC based on a rolling, 365-day summation of emissions.
2. The combined annual emissions from the entire facility (K015 through K036) shall not exceed 9.0 tpy of any single HAP based on a rolling, 365-day summation of emissions.

3. The combined annual emissions from the entire facility (K015 through K036) shall not exceed 24.0 tpy of total combined HAPs based on a rolling, 365-day summation of emissions.

B. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records in accordance with Conditions I.B.1., II.B.1., III.B.1., and IV.B.1. of this permit.
2. The permittee shall collect and record the following information each day for all emissions units:
 - a. the total VOC emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in pounds or tons per day;
 - b. the total rolling, 365-day summation of the VOC emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in tons per year;
 - c. the total individual HAP emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in pounds or tons per day;
 - d. the total rolling, 365-day summation of the individual HAP emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in tons per year;
 - e. the total combined HAP emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in pounds or tons per day;
 - f. the total rolling, 365-day summation of the combined HAP emissions from all of the emissions units at this facility (K015 through K039) as determined per Conditions I.B.1, II.B.1, III.B.1, and IV.B.1 of this permit, in tons per year;

C. Reporting Requirements

1. The permittee shall notify the CCHDAPCD in writing

of any exceedance of the rolling, 365 day emission limitations denoted in Conditions V.A.1, V.A.2, and V.A.3. The notification shall include a copy of such record and shall be sent to the CCHDAPCD within 30 days following the end of the calendar month in which the exceedance occurred.

D. Testing Requirements

1. Compliance with the facility-wide emission limitation shall be determined in accordance with the following methods:

a. Emission Limitation

97.65 tpy VOC based upon a rolling, 365-day summation of emissions

Applicable Compliance Method

Maintain records and submit reports in accordance with Conditions V.B and V.C.

b. Emission Limitation

9.0 tpy of any single HAP based upon a rolling, 365-day summation of emissions

Applicable Compliance Method

Maintain records and submit reports in accordance with Conditions V.B and V.C.

c. Emission Limitation

24.0 tpy of total combined HAPs based upon a rolling, 365-day summation of emissions

Applicable Compliance Method

Maintain records and submit reports in accordance with Conditions V.B and V.C.

E. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 15-1328. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the estimated emission rates provided in the permit application for n-hexane, hexane isomers, ethanol, heptane, and isopropanol were used to demonstrate compliance with Ohio EPA's "Air Toxics Policy" and are based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in

the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the SCREEN3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

Pollutant: n-hexane

TLV (ug/m3): 176
Maximum Hourly Emission Rate (lbs/hr): 0.87
Predicted 1 Hour Maximum Ground-Level
Concentration at the Fenceline (ug/m3): 140
Maximum Acceptable Ground-Level Concentration
(MAGLC) (ug/m3): 4,190

Pollutant: hexane isomers

TLV (ug/m3): 1,760
Maximum Hourly Emission Rate (lbs/hr): 1.73
Predicted 1 Hour Maximum Ground-Level
Concentration at the Fenceline (ug/m3): 278
Maximum Acceptable Ground-Level Concentration
(MAGLC) (ug/m3): 41,905

Pollutant: ethanol

TLV (ug/m3): 1,880
Maximum Hourly Emission Rate (lbs/hr): 1.29
Predicted 1 Hour Maximum Ground-Level
Concentration at the Fenceline (ug/m3): 208
Maximum Acceptable Ground-Level Concentration
(MAGLC) (ug/m3): 44,762

Pollutant: heptane

TLV (ug/m3): 1,640
Maximum Hourly Emission Rate (lbs/hr): 15.65
Predicted 1 Hour Maximum Ground-Level
Concentration at the Fenceline (ug/m3): 2,518
Maximum Acceptable Ground-Level Concentration
(MAGLC) (ug/m3): 39,048

Pollutant: isoproponal

TLV (ug/m3): 983
Maximum Hourly Emission Rate (lbs/hr): 4.26
Predicted 1 Hour Maximum Ground-Level
Concentration at the Fenceline (ug/m3): 685
Maximum Acceptable Ground-Level Concentration
(MAGLC) (ug/m3): 23,405

NOTE: The permittee performed the Air Toxics

Analysis based on a facility wide evaluation. However, not all emissions units listed in this permit have air toxic emissions in excess of one (1) tpy. As can be seen by the results above, the predicted concentrations are well within the MAGLC on a facility wide basis. The permittee performed an Air Toxics Analysis for the following additional air toxics on a facility wide basis: ammonia, propylene glycol monomethyl ether, octane, oil mist (mineral). These additional air toxics did not have estimated emission rates in excess of one (1) tpy for any individual emissions unit. These analysis of these additional air toxics also showed predicted concentrations well within the MAGLC on a facility wide basis.

2. Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the CCHD-APCD are required, including the possible issuance of modifications to PTI number 15-1328 and the operating permit:
 - (a) Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table.
 - (b) Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
 - (c) Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
 - (d) Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
 - (e) Any change in the composition of the coatings or cleanup materials, or use of new coatings

or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).

3. The following terms and conditions shall supersede all of the air pollution control requirements contained in the permit to install (application number 15-640) issued for these emissions units on April 10, 1991: V.A, V.B, V.C, V.D, and V.E.

***New Source Review Discussion
for the Phoenix Packaging Company
Installation of new coating lines and
modification of existing coating lines
for the production of 2- and 3-piece can ends
PTI #15-1328***

Background Information

The Phoenix Packaging Company (PPC) is proposing to install new coating lines and modify existing coating lines for the production of 2- and 3- piece can ends. The main goal of this proposed permit is to obtain federally enforceable permit restrictions which will limit the potential to emit of this facility in order to stay below the Title V thresholds (100 tpy for VOCs; 10 tpy for a single HAP; and 25 tpy for combined HAPs). With the issuance of this proposed permit, total facility emissions will be less than 98 tons per year, and the total HAP emissions will be less than 3 tons per year. The potential to emit will be restricted by placing restrictions on the amount of each coating and cleanup material which can be employed based on a rolling,

365-day summation of each material.

New Source Review Issues

Stark County is currently designated as attainment for each of the criteria pollutants. Since the restricted potential to emit for these emissions units is below the significant threshold for PSD, this source was not required to perform a PSD analysis.

Minor Source Review Issues

Pursuant to OAC Rule 3745-31-05, new emissions units must comply with all applicable State and Federal air pollution regulations. This emissions unit is not subject to any Federal air regulations. At a minimum, all new emissions units must satisfy the State requirements in order to obtain a Permit to Install. Consequently, these emissions units must comply with the applicable OAC air pollution regulations, employ Best Available Technology, comply with the Ohio EPA's Air Toxics Policy (if applicable), and comply with the minor source modeling (if applicable) in accordance with Engineering Guide #69.

Emissions Units K015, K017, K020, K022, K025, K028, K031, K034, and K036

Emissions Units K015, K017, K020, K022, K025, K028, K031, K034, and K036 are subject to OAC Rule 3745-21-09(D)(1)(e) and (D)(2)(e) - surface coating of two- and three-piece cans. This regulation establishes an allowable VOC emission rate of 3.7 lbs of VOC per gallon of coating, excluding water and exempt solvents from an end sealing compound line. BAT establishes a more stringent emission rate than allowed by this rule.

For emissions units K015, K017, K022, K034, and K036 BAT will be satisfied by the employment of coatings with a VOC content not to exceed 0.00 lbs VOC/gallon of coating, excluding water and exempt solvents. For emissions units K020, K025, K028, and K031 BAT will be satisfied by the employment of coatings with a VOC content not to exceed 3.61 lbs VOC/gallon of coating, excluding water and exempt solvents. In addition, compliance with the applicable OAC rules and the terms and conditions (including coating restrictions) of the permit will ensure that these emissions units will not cause an adverse impact to the ambient air.

Emissions Units K016, K019, K021, K024, K027, K030, and K033

These emissions units are subject to OAC Rule 3745-21-09(U)(2)(e)(ii) - surface coating of miscellaneous metal parts and products. This rule restricts the amount of coating employed to less than 10 gallons per day. These emissions units employ three coatings per unit: lubricant, rust inhibitor, and repair coat. The total combined coating usage for all coatings will be restricted to less than 10 gallons per day per emissions unit.

BAT for these emissions units will be satisfied by complying with the applicable OAC air regulations and the terms and conditions of the proposed permit (including coating usage restrictions).

Emissions Units K023, K029, K035, K037, and K039

These emissions units are subject to OAC Rule 3745-21-09(U)(1)(i) - surface coating of miscellaneous metal parts and products. This regulation establishes an allowable VOC emission rate of 3.0 lbs of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of 3745-21-09(U). BAT establishes a more stringent emission rate than allowed by this rule.

BAT will be satisfied by the employment of coatings with a VOC content not to exceed 2.97 lbs VOC/gallon of coating, excluding water and exempt solvents. In addition, compliance with the applicable OAC rules and the terms and conditions (including coating restrictions) of the permit will ensure that these emissions units will not cause an adverse impact to the ambient air.

NOTE: PPC performed a BAT analysis for the control of VOC emissions from all of the above listed emissions units. PPC took a conservative approach in assuming that 100% of the VOC emissions could be ducted to a single control device sized for 34,700 acfm with a 97 percent VOC destruction efficiency. PPC evaluated seven different control options: thermal incinerators (without heat recovery; with recuperative heat recovery; with regenerative heat recovery); fixed bed catalytic incinerators (without heat recovery; with heat recovery); fluid bed catalytic incinerators (without heat recovery; with heat recovery). Each control option was determined to be cost prohibitive. The cost effectiveness for each of the control options was greater than \$14,000/ton.

Air Toxics Analysis

Phoenix Packaging performed an Air Toxics Analysis based on a facility wide evaluation. Using the SCREEN3 model, it was demonstrated that based on total facility emissions of each air toxic the predicted concentration was well within the Maximum Allowable Ground Level Concentration (MAGLC). It should be noted that the facility-wide approach was a conservative approach since not every emissions unit had estimated air toxic emissions greater than one (1) ton per year.

Emissions units K020, K025, K028, and K031 had estimated air toxic emissions greater than one tpy. The conservative facility-wide air toxics analysis for each air toxic proposed to be emitted verified compliance with Ohio EPA's Air Toxics Policy for these emissions units.

For each of the other emissions units in this proposed permit, the estimated emission of air toxic pollutants were determined to be less than one ton per year each. Consequently, an air toxics analysis was not required for these other units, however as noted above, PPC included the air toxic emissions from these units in performing their facility-wide analysis.

Minor Source Modeling

Minor Source modeling was not required since the only pollutant of concern is volatile organic compounds. Engineering Guide #69 does contain a minor source modeling threshold for VOCs since an accurate model for the modeling of VOC emissions is not available for use.

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