



State of Ohio Environmental Protection Agency

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

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 16-02381**

**Fac ID: 1677110035**

**DATE: 11/18/2004**

Baker McMillen Company  
Carl Sauers  
3688 Wyoga Lake Road  
Stow, OH 44224

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

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

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

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

Sincerely,

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

cc: USEPA

ARAQMD



---

**Permit To Install  
Terms and Conditions**

**Issue Date: 11/18/2004  
Effective Date: 11/18/2004**

---

**FINAL PERMIT TO INSTALL 16-02381**

Application Number: 16-02381  
Facility ID: 1677110035  
Permit Fee: **\$800**  
Name of Facility: Baker McMillen Company  
Person to Contact: Carl Sauers  
Address: 3688 Wyoga Lake Road  
Stow, OH 44224

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3688 Wyoga Lake Road  
Stow, Ohio**

Description of proposed emissions unit(s):  
**Dip Process Line 1 and Dip Tank 2.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

#### **3. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

#### **10. Public Disclosure**

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

#### **11. Applicability**

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

#### **12. Best Available Technology**

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

6

**Baker McMillen Company**  
**PTI Application: 16-02381**  
**Issued: 11/18/2004**

**Facility ID: 1677110035**

**Baker McMillen Company**  
**PTI Application: 16-02381**  
**Issued: 11/18/2004**

**Facility ID: 1677110035**

**14. Construction Compliance Certification**

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

**15. Fees**

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

**B. Permit to Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	99.5
Ind. HAP	9.95
Total HAP	24.5

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Dip Process Line #1	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include the requirements of OAC rule 3745-21-07(G)(2).  11.02 lbs/hr volatile organic compound (VOC) 48.3 tpy VOC
	OAC rule 3745-35-07	Combined annual coating input usage rates* and combined annual emissions from all facility emissions units (P003 - P004, and R002 - R004) shall not exceed the following as 12-month summations:  99.5 tpy VOC*; 24.5 tpy combined hazardous air pollutants (HAP); and 9.95 tpy individual HAP. See A.2.a - A.2.d below.
	OAC rule 3745-21-07(G)(2)	See B.1 below.

\*annual VOC input rates equivalent to annual VOC emission rates and are based upon 100% of the solvent in the coating materials being emitted.

9

**Baker**

**PTI A**

**Issued: 11/18/2004**

Emissions Unit ID: **P003**

## 2. Additional Terms and Conditions

**2.a** The combined annual coating usage input rates\* and combined annual emissions from the entire facility (P003 - P004, and R002 - R004) shall not exceed the following as rolling, 12-month summations:

- i. 99.5 tons of volatile organic compounds (VOC);
- ii. 24.5 tons of all hazardous air pollutants (HAP); and
- iii. 9.95 tons of any individual HAP.

**2.b** The potential emissions [as defined by OAC rule 3745-77-01(BB)] of HAPs as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall be less than 10 TPY for any single HAP and 25 TPY for any combination of HAPs, based upon rolling, 12-month summations.

**2.c** To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the maximum allowable cumulative coating usage input rates\* and emissions levels specified in the following table:

Month	Maximum Allowable Cumulative Coating Usage Input Rates and Emissions of VOC (tons)*	Maximum Allowable Cumulative Emissions of Individual HAP (tons)	Maximum Allowable Cumulative Emissions Combined HAP (tons)
1	8.3	0.82	2.0
1-2	16.6	1.64	4.0
1-3	24.9	2.46	6.0
1-4	33.2	3.28	8.0
1-5	41.5	4.10	10.0
1-6	49.8	4.92	12.0
1-7	58.0	5.74	14.0
1-8	66.3	6.56	16.0
1-9	74.6	7.38	18.0
1-10	82.9	8.20	20.0
1-11	91.2	9.02	22.0
1-12	99.5	9.95	24.5

**2.d** After the first 12 calendar months of operation following the issuance of this permit, compliance with the facility-wide coating usage input rates limitation and VOC and HAP emission limitations shall be based upon a rolling, 12-month summation of the applicable

coating usage input rates and the annual emission limitations, in tons.

**B. Operational Restrictions**

1. The permittee shall not employ any photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for each coating and cleanup material employed in emissions units P003 - P004, R002 - R004:
  - a. the name and identification number of each coating, as applied;
  - b. the total VOC content, in pounds of VOC per gallon, of each coating and cleanup material, as applied;
  - c. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - d. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (c)];
  - e. the number of gallons of each coating employed;
  - f. the name and identification of each cleanup material employed;
  - g. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - h. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (g)];
  - i. the number of gallons of each cleanup material employed;
  - j. the total individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP, the sum of (c) times (e) for all of the coatings plus the sum of (g) times (i) for all of the cleanup materials];
  - k. the total combined HAP emissions from all coatings and cleanup materials employed, in

Emissions Unit ID: **P003**

pounds or tons per month [the sum of (d) times (e) for all of the coatings plus the sum of (h) times (i) for all of the cleanup materials];

- l. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (b) times (e) for all of the coatings plus the sum of (b) times (i) for all of the cleanup materials];
  - m. the rolling, 12-month summation of the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per year [sum of (1) for the previous 12 calendar months];
  - n. the rolling, 12-month summation of individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year [the sum of (j) for the previous 12 calendar months];
  - o. the rolling, 12-month summation of the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year [the sum of (k) for the previous 12 calendar months]
2. The permittee shall collect and record the following information for each day for the coating operation:
- a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the VOC content of each coating and cleanup material, in pounds per gallon;
  - d. the total number of hours the emissions unit was in operation;
  - e. the total VOC emission rate for all coatings and cleanup materials, in pounds per day; and
  - f. the average hourly VOC emission rate for all coatings and cleanup materials, i.e. (e)/(d) in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permit to install for emissions units P003 - P004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Methyl n-Amyl Ketone

TLV (mg/m<sup>3</sup>): 233

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 46.06

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 5,535.7

Pollutant: Isopropyl Acetate

TLV (mg/m<sup>3</sup>): 950

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 230.32

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 22,619

Pollutant: Isopropyl Alcohol

TLV (mg/m<sup>3</sup>): 980

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 276.38

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 23,333

Pollutant: Butyl Acetate

TLV (mg/m<sup>3</sup>): 710

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 667.92

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 16,905

Pollutant: 2-Butoxyethanol

TLV (mg/m<sup>3</sup>): 240

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 115.16

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 5,714.3

Pollutant: Ethylene Glycol Monobutyl Ether

TLV (mg/m<sup>3</sup>): 240

Maximum Hourly Emission Rate (pounds/hour): 2.47

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 26.18

**Baker McMillen Company**  
**PTI Application: 16-02281**  
**Issued**

**Facility ID: 1677110035**

Emissions Unit ID: **P003**

Maximum Acceptable Ground-Level Concentration (MAGLC) ( $\mu\text{g}/\text{m}^3$ ): 5,714.3

Pollutant: Aliphatic Naphtha

TLV ( $\text{mg}/\text{m}^3$ ): 580

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 138.19

Maximum Acceptable Ground-Level Concentration (MAGLC) ( $\mu\text{g}/\text{m}^3$ ): 13,809

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

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month facility emission limitation for VOC, individual HAP, and combined HAP, and, for the first 12 calendar months of operation following the issuance of this permit, all exceedance of the maximum allowable cumulative coating usage input rate levels and emission levels.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the average hourly mass emission limitation for VOC, and the actual VOC emissions for each such period.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Conditions of this permit.
4. The permittee shall submit annual reports which specify the VOC, total HAP, and individual HAP emissions, in tons, for P003, P004, R002 - R004. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
  
99.5 tpy VOC for entire facility  
  
Applicable Compliance Method:  
  
Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the VOC content of each coating and cleanup material.
  - b. Emission Limitation:

24.5 tpy of all HAPs for entire facility

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the HAP content of each coating and cleanup material.

c. Emission Limitation:

9.95 tpy of any individual HAP for entire facility

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the HAP content of each coating and cleanup material.

d. Emission Limitation

11.02 pounds/hour VOC  
48.3 tpy VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.2 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the VOC content of each coating and cleanup material.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Dip Tank #2	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include the requirements of OAC rule 3745-21-07(G)(2).  2.47 lbs/hr volatile organic compound (VOC) 10.8 tpy VOC
	OAC rule 3745-35-07	Combined annual coating input usage rates* and combined annual emissions from all facility emissions units (P003 - P004, and R002 - R004) shall not exceed the following as 12-month summations:  99.5 tpy VOC*; 24.5 tpy combined hazardous air pollutants (HAP); and 9.95 tpy individual HAP. See A.2.a - A.2.d below.
	OAC rule 3745-21-07(G)(2)	See B.1 below.

\*annual VOC input rates equivalent

19

**Baker**

**PTI A**

**Issued: 11/18/2004**

Emissions Unit ID: **P004**

to annual VOC emission rates and are based upon 100% of the solvent in the coating materials being emitted.

## 2. Additional Terms and Conditions

**2.a** The combined annual coating usage input rates\* and combined annual emissions from the entire facility (P003 - P004, and R002 - R004) shall not exceed the following as rolling, 12-month summations:

- i. 99.5 tons of volatile organic compounds (VOC);
- ii. 24.5 tons of all hazardous air pollutants (HAP); and
- iii. 9.95 tons of any individual HAP.

**2.b** The potential emissions [as defined by OAC rule 3745-77-01(BB)] of HAPs as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall be less than 10 TPY for any single HAP and 25 TPY for any combination of HAPs, based upon rolling, 12-month summations.

**2.c** To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the maximum allowable cumulative coating usage input rates\* and emissions levels specified in the following table:

Month	Maximum Allowable Cumulative Coating Usage Input Rates and Emissions of VOC (tons)*	Maximum Allowable Cumulative Emissions of Individual HAP (tons)	Maximum Allowable Cumulative Emissions Combined HAP (tons)
1	8.3	0.82	2.0
1-2	16.6	1.64	4.0
1-3	24.9	2.46	6.0
1-4	33.2	3.28	8.0
1-5	41.5	4.10	10.0
1-6	49.8	4.92	12.0
1-7	58.0	5.74	14.0
1-8	66.3	6.56	16.0
1-9	74.6	7.38	18.0
1-10	82.9	8.20	20.0
1-11	91.2	9.02	22.0
1-12	99.5	9.95	24.5

**2.d** After the first 12 calendar months of operation following the issuance of this permit, compliance with the facility-wide coating usage input rates limitation and VOC and HAP

Emissions Unit ID: **P004**

emission limitations shall be based upon a rolling, 12-month summation of the applicable coating usage input rates and the annual emission limitations, in tons.

**B. Operational Restrictions**

1. The permittee shall not employ any photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for each coating and cleanup material employed in emissions units P003 - P004, R002 - R004:
  - a. the name and identification number of each coating, as applied;
  - b. the total VOC content, in pounds of VOC per gallon, of each coating and cleanup material, as applied;
  - c. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - d. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (c)];
  - e. the number of gallons of each coating employed;
  - f. the name and identification of each cleanup material employed;
  - g. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - h. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (g)];
  - i. the number of gallons of each cleanup material employed;
  - j. the total individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP, the sum of (c) times (e) for all of the coatings plus the sum of (g) times (i) for all of the cleanup materials];
  - k. the total combined HAP emissions from all coatings and cleanup materials employed, in

pounds or tons per month [the sum of (d) times (e) for all of the coatings plus the sum of (h) times (i) for all of the cleanup materials];

- l. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (b) times (e) for all of the coatings plus the sum of (b) times (i) for all of the cleanup materials];
  - m. the rolling, 12-month summation of the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per year [sum of (1) for the previous 12 calendar months];
  - n. the rolling, 12-month summation of individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year [the sum of (j) for the previous 12 calendar months];
  - o. the rolling, 12-month summation of the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year [the sum of (k) for the previous 12 calendar months]
2. The permittee shall collect and record the following information for each day for the coating operation:
- a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the VOC content of each coating and cleanup material, in pounds per gallon;
  - d. the total number of hours the emissions unit was in operation;
  - e. the total VOC emission rate for all coatings and cleanup materials, in pounds per day; and
  - f. the average hourly VOC emission rate for all coatings and cleanup materials, i.e. (e)/(d) in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permit to install for emissions units P003 - P004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's

Emissions Unit ID: **P004**

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

Pollutant: Methyl n-Amyl Ketone

TLV (mg/m<sup>3</sup>): 233

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 46.06

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 5,535.7

Pollutant: Isopropyl Acetate

TLV (mg/m<sup>3</sup>): 950

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 230.32

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 22,619

Pollutant: Isopropyl Alcohol

TLV (mg/m<sup>3</sup>): 980

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 276.38

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 23,333

Pollutant: Butyl Acetate

TLV (mg/m<sup>3</sup>): 710

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 667.92

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 16,905

Pollutant: 2-Butoxyethanol

TLV (mg/m<sup>3</sup>): 240

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 115.16

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 5,714.3

Pollutant: Ethylene Glycol Monobutyl Ether

**Baker**

**PTI A**

**Issued: 11/18/2004**

Emissions Unit ID: **P004**

TLV (mg/m<sup>3</sup>): 240

Maximum Hourly Emission Rate (pounds/hour): 2.47

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>):26.18

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 5,714.3

Pollutant: Aliphatic Naphtha

TLV (mg/m<sup>3</sup>): 580

Maximum Hourly Emission Rate (pounds/hour): 11.02

Predicted 1 hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>):138.19

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m<sup>3</sup>): 13,809

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

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

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month facility emission limitation for VOC, individual HAP, and combined HAP, and, for the first 12 calendar months of operation following the issuance of this permit, all exceedance of the maximum allowable cumulative coating usage input rate levels and emission levels.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the average hourly mass emission limitation for VOC, and the actual VOC emissions for each such period.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Conditions of this permit.
4. The permittee shall submit annual reports which specify the VOC, total HAP, and individual HAP emissions, in tons, for P003, P004, R002 - R004. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
  
99.5 tpy VOC for entire facility  
  
Applicable Compliance Method:  
  
Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the VOC content of each coating and cleanup material.
  - b. Emission Limitation:

27

**Baker**

**PTI A**

**Issued: 11/18/2004**

Emissions Unit ID: **P004**

24.5 tpy of all HAPs for entire facility

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the HAP content of each coating and cleanup material.

c. Emission Limitation:

9.95 tpy of any individual HAP for entire facility

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.1 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the HAP content of each coating and cleanup material.

d. Emission Limitation

2.47 pounds/hour VOC

10.8 tpy VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements of section C.2 of these T&Cs. Formulation data or USEPA Method 24 shall be used to determine the VOC content of each coating and cleanup material.

**F. Miscellaneous Requirements**

None