



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
MIAMI COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 08-04233

DATE: 3/12/2002

DAP Inc
Matthew Stewart
2400 Boston St Ste 200
Baltimore, MD 21224

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: USEPA

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 3/12/2002
Effective Date: 3/12/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 08-04233

Application Number: 08-04233
APS Premise Number: 0855130356
Permit Fee: \$0
Name of Facility: DAP Inc
Person to Contact: Matthew Stewart
Address: 2400 Boston St Ste 200
Baltimore, MD 21224

Location of proposed air contaminant source(s) [emissions unit(s)]:
**875 N Third St
Tipp City, Ohio**

Description of proposed emissions unit(s):
administrative modification of PTI 08-04233, issued 3/14/01, to change duplicated emission unit ID P039 to P050.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install General Terms and Conditions****1. Monitoring and Related Recordkeeping 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:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. 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:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. 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 appropriate Ohio EPA District Office or local air agency. The written 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. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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.
- iv. 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.

2. 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 appropriate Ohio EPA District Office or local air agency 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).

3. 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.

4. 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.

5. Severability Clause

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.

6. 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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, 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, reopening 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.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any of 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. 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.
- b. 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:
 - i. 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.
 - ii. 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.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. 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.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. 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.

10. Permit To Operate Application

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

11. 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.

12. 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.

B. State Only Enforceable Permit To Install General Terms and Conditions**1. Compliance Requirements**

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 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 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. 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.

4. 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.

5. 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.

6. 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.

7. 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).

8. 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. 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> |
|------------------|----------------------|
| OC | 104.67 |
| Particulates | 0.90 |

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

1. Within 120 days after promulgation of 40 CFR 63 Subpart FFFF, Misc. Organic NESHAP, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report:
 - a. the name and mailing address of the permittee;
 - b. the physical location of the source if it is different from the mailing address;
 - c. identification of the relevant MACT standard and the permittee's compliance date;
 - d. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity, and an identification of each emission point of each hazardous air pollutant;
 - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.

2. Within 60 days following completion of the required compliance demonstration activity specified in the 40 CFR 63 Subpart FFFF, the permittee shall submit a notification of compliance status that contains the following information:
 - a. the methods used to determine compliance;
 - b. the results of any performance tests, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
 - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart FFFF;
 - e. an analysis demonstrating whether the affected source is a major source or an area source;
 - f. a description of the air pollution control equipment or method for each emission point,

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including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and

- g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart FFFF.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P005 - Let-down Paint Tanks 220, 221, 222, 227, and 229 | OAC rule 3745-31-05(A)(3) | 2.31 lbs organic compounds (OC)/hr, 17.28 lbs OC/day, and 3.20 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for each let-down paint tank identified as Tank 220, Tank 221, Tank 222, Tank 227, and Tank 229:
 - a. the company identification for each batch of product mixed/stored;
 - b. the number of hours of operation;
 - c. the number of gallons mixed/stored of each product;

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- d. the number of batches of each product mixed/stored;
- e. the calculated vapor pressure (psia) of the product;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of each let-down tank when in operation (R)**;
- h. the open area of each tank (square meters);

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- i. partial pressure of each VOC in vessel headspace (psia);
- j. the calculated gas vapor pressure in vessel (psia);
- k. average initial gas temperature and final gas temperature**;
- l. the determination of the displacement, evaporation, point source, and heat up losses for each product mixed/stored in each let-down tank, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- m. the total calculated OC emission rate which is the summation of (l) for all let down tanks, 220, 221, 222, 227, and 229;
- n. the average hourly OC emissions (m/b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 1.0 on the basis that the vapor space is saturated with vapors, submerged fill
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)**

Evaporation = $(MW)(K)(A)(P)3600/(R)(T)$

Where:

$K = (0.00438)(U^{0.78})[(18/MW)^{.33}]$
 U = 0.1 mile per hour from USEPA example
 R = universal gas constant, $(10.73 \text{ psia})(\text{ft}^3)/(\text{lbmole})(\text{R})$
 A = open area of tank

Point Source = $(Ed)(Q_{ex})(T_{ex})/\text{Batch volume}$

Where:

Q_{ex} = volumetric exhaust rate measured at 24.23 gal/min
 T_{ex} = time exhaust fan is running during dries addition (assume 5 min per batch)

Emissions Unit ID: P005

$$\text{Heat Up} = [(P_{xT1}/14.7 - P_{xT1}) + (P_{xT2}/14.7 - P_{xT2})] / (2)(\Delta n)(MW)$$

Where:

$$\Delta n = (V/R)(P_{a1}/T_1 - P_{a2}/T_2) = \text{lb-moles of gas displaced}$$

P_x = partial pressure of each VOC in vessel headspace (psia)

P_a = gas pressure in vessel (psia)

T_1 = initial gas temperature (R)**

T_2 = final gas temperature (R)**

**The mixing processes occur at ambient temperature. No heat is applied, no exothermic reactions occur and no appreciable amount of internal friction is generated.

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions from the mixing and/or storing of materials exceeded 2.31 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions from the mixing and/or storing of materials exceeded 17.28 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
2.31 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based upon the record keeping as specified in III.1. of this permit.
 - b. Emission Limitation-
17.28 lbs OC/day

Applicable Compliance Method-
Compliance shall be based upon the record keeping as specified in III.1. of this permit.
 - c. Emission Limitation-
33.20 TPY OC

Applicable Compliance Method-
Compliance shall be determined based upon

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the record keeping in Section III.1 of this permit and shall be the summation of the organic emissions, divided by 2000 lbs/ton.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P005 - Let-down Paint Tanks 220, 221, 222, 227, and 229 | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit (P005) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m3): 188,400

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Emissions Unit ID: P005

Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 135.8

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MAGLC (ug/m³): 4485.0

Pollutant: Methanol

TLV (ug/m³): 262,090

Maximum Hourly Emission Rate (lbs/hr): 1.40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 46.13

MAGLC (ug/m³): 6240

Physical changes to or changes in the method of operation of the emissions unit that 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.)

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2. 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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P012 - No. 1 and No. 2 Cowles Small Paint Mixers | OAC rule 3745-31-05(A)(3) | 1.28 lbs organic compounds (OC)/hr, 30.72 lbs/day and 5.60 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for each paint mixer identified as Mixer 1 and Mixer 2:
 - a. the company identification for each batch of product mixed/stored;
 - b. the number of hours of operation;
 - c. the number of gallons mixed/stored of each product;
 - d. the number of batches of each product mixed/stored;

- e. the calculated vapor pressure (psia) of the product (psia);
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of each let-down tank when in operation (R)**;
- h. the open area of each tank (square meters);

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- i. partial pressure of each VOC in vessel headspace (psia);
- j. the calculated gas vapor pressure in vessel (psia);
- k. average initial gas temperature and final gas temperature**;
- l. the determination of the displacement, evaporation, point source, and heat up losses for each product mixed/stored in each paint mixer, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- m. the total calculated OC emission rate which is the summation of (l) for all both paint mixers;
- n. the average hourly emission rate (m)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 1.0 on the basis that the vapor space is saturated with vapors, submerged fill
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

Evaporation = $(MW)(K)(A)(P)3600/(R)(T)$

Where:

$K = (0.00438)(U^{0.78})[(18/MW)^{.33}]$
 U = 0.1 mile per hour from USEPA example
 R = universal gas constant, $(10.73 \text{ psia})(\text{ft}^3)/(\text{lbmole})(\text{R})$
 A = open area of tank

Point Source = $(Ed)(Q_{ex})(T_{ex})/\text{Batch volume}$

Where:

Q_{ex} = volumetric exhaust rate measured at 24.23 gal/min
 T_{ex} = time exhaust fan is running during dries addition (assume 5 min per batch)

$$\text{Heat Up} = [(P_{xT1}/14.7 - P_{xT1}) + (P_{xT2}/14.7 - P_{xT2})] / (2)(\Delta n)(\text{MW})$$

Where:

$\Delta n = (V/R)(P_{a1}/T_1 - P_{a2}/T_2) = \text{lb-moles of gas displaced}$

$P_x = \text{partial pressure of each VOC in vessel headspace (psia)}$

$P_a = \text{gas pressure in vessel (psia)}$

$T_1 = \text{initial gas temperature (R)}$

$T_2 = \text{final gas temperature (R)}$

**The mixing processes occur at ambient temperature. No heat is applied, no exothermic reactions occur and no appreciable amount of internal friction is generated.

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IV. Reporting Requirements

- 1. In accordance with paragraph A.2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions from the mixing of materials exceeded 1.28 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions from the mixing of materials exceeded 30.48 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
 - 1.28 lbs OC/hr
 - Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit.
 - b. Emission Limitation-
 - 30.72 lbs OC/day
 - Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit.
 - c. Emission Limitation-
 - 5.6 TPY OC

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Emissions Unit ID: P012

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the organic emissions, divided by 2000 lbs/ton.

VI. Miscellaneous Requirements

None

Modification Issued: 3/12/2002

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P012 - No. 1 and No. 2 Cowles Small Paint Mixers | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P012) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m³): 188,400

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Facility ID: 0855130356

Emissions Unit ID: P012

Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 135.8

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MAGLC (ug/m³): 4485.0

Physical changes to or changes in the method of operation of the emissions unit that 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.)
2. 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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Modification Issued: 3/12/2002

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--|---|
| P050 - Aerosol Charger for the Charging of Aerosol Cans with Propellant Modified | OAC rule 3745-31-05(A)(3) OAC rule 3745-21-07(G)(2) | 0.60 lb organic compound (OC)/hr, 14.41 lbs OC/day, 2.62 TPY OC The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the number of cans filled;
 - b. the density of the material employed in the aerosol charger;
 - c. the number of hours of operation.

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions from the charging of materials exceeded 0.60 pound per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions from the mixing of materials exceeded 14.41 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
0.60 lb OC/hr

Applicable Compliance Method-
Compliance shall be determined by the following calculation:

- (i) dividing the density of each material employed in the aerosol charging process (lbs/gal) by the conversion factor of 3785.41 cc/gal;
- (ii) multiplying (i) for each material charged by an OC loss of 0.08 cc/can (emission factor supplied by DAP);
- (iii) multiplying (ii) for each material charged by the number of cans filled each day;
- (iv) summing the results in (iii) for each material charged;
- (v) dividing (iv) by the number of hours of

operation each day.

b. Emission Limitation-

14.41 lbs OC/day

Applicable Compliance Method-

- (i) dividing the density of each material charged in the aerosol charging process (lbs/gal) by the conversion factor of 3785.41 cc/gal;
- (ii) multiplying (i) for each material charged by an OC loss of 0.08 cc/can (emission factor supplied by DAP);
- (iii) multiplying (ii) for each material charged by the number of cans filled each day;
- (iv) summing the results in (iii) for each material employed.

c. Emission Limitation-

2.62 TPY OC

Applicable Compliance Method-

Compliance shall be determined by summing the daily OC emissions (lbs), and dividing by 2000 lbs/ton.

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Emissions Unit ID: ***P050***

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P050 - Aerosol Charger for the Charging of Aerosol Cans with Propellant Modified | | |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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PTI Application: **08 04222**

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None

Facility ID: **0855130356**

Emissions Unit ID: **P050**

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P040 - Daptex Charger for the Charging of Aerosol Cans with Propellant | OAC rule 3745-31-05(A)(3) | 0.51 lb organic compound (OC)/hr, 12.27 lbs OC/day, 2.24 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the number of cans filled;
 - b. the density of the material employed in the Daptex charger;
 - c. the number of hours of operation.

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions from the charging of materials exceeded 0.51 pound per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions from the mixing of materials exceeded 12.27 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
0.51 lb OC/hr

Applicable Compliance Method-
Compliance shall be determined by the following calculation:
 - (i) dividing the density of each material charged in the Daptex charging process (lbs/gal) by the conversion factor of 3785.41 cc/gal;
 - (ii) multiplying (i) for each material charged by an OC loss of 0.16 cc (emission factor supplied by DAP);
 - (iii) multiplying (ii) for each material charged by the number of cans filled each day;
 - (iv) summing the results in (iii) for each material charged;
 - (v) dividing (iv) by the number of hours of operation each day.

b. Emission Limitation-

12.27 lbs OC/day

Applicable Compliance Method-

(i) dividing the density of each material charged in the Daptex charging process (lbs/gal) by the conversion factor of 3785.41 cc/gal;

(ii) multiplying (i) for each material charged by an OC loss of 0.16 cc (emission factor supplied by DAP);

(iii) multiplying (ii) for each material charged by the number of cans filled each day;

(iv) summing the results in (iii) for each material charged.

c. Emission Limitation-

2.24 TPY OC

Applicable Compliance Method-

Compliance shall be determined by summing the daily OC emissions (lbs), and dividing by 2000 lbs/ton.

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Emissions Unit ID: P040

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P040 - Daptex Charger for the Charging of Aerosol Cans with Propellant | | |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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PTI Application: **08 04222**

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Facility ID: **0855130356**

Emissions Unit ID: P040

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P041 - Large Elgin Can Filler Located at the Contact Cements Packaging Line | OAC rule 3745-31-05(A)(3) | 5.7 lbs organic compound (OC)/hr, and 62.50 lbs OC/day for each day when only non-photochemically reactive materials are packaged |
| | | 5.7 lbs OC/hr, 40 lbs OC/day for each day when any photochemically reactive materials are packaged. |
| | | 11.40 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the large elgin can filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive materials are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of each product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R)**;
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 0.5 on the basis that the material is loaded into a clean container
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

**Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. On days when any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

organic compound emissions exceeded 5.7 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. On days when any photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.

- c. On days when only non-photochemically reactive material was packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 62.50 lbs/day and the actual average hourly organic compound

Emissions Unit ID: P041

emissions for each such day.

- 2. The permittee shall submit annual reports to the Director (Ohio EPA District Office or local air agency) for the elgin can filler which summarizes the actual annual OC emissions for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

5.7 lbs OC/hr

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in Section III.1 of this permit.

b. Emission Limitation-

40 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in Section III.1 of this permit

c. Emission Limitation-

62.50 lbs OC/day during any day on which only non-photochemically reactive material is packaged

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in Section III.1 of this permit.

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Emissions Unit ID: P041

d. Emission Limitation-

11.40 TPY OC

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the daily organic compound emission rate (lbs), and dividing by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

Modification Issued: 3/12/2002

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P041 - Large Elgin Can Filler Located at the Contact Cements Packaging Line | | Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P041) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m3): 188,400

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Emissions Unit ID: P041

Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 135.8

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MAGLC (ug/m³): 4485.0

Pollutant: MEK

TLV (ug/m³): 589,770

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 33.32

MAGLC (ug/m³): 14,042

Physical changes to or changes in the method of operation of the emissions unit that 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.)
2. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the

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Emissions Unit ID: P041

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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P042 - Small Elgin Can Filler located at the Packaging Line for Contact Cements and Mastics | OAC rule 3745-31-05(A)(3) | 4.8 lbs organic compound (OC)/hr, and 62.50 lbs OC/day for each day when only non-photochemically reactive materials are packaged |
| | | 4.8 lbs OC/hr, 40 lbs/day for each day when any photochemically reactive materials are packaged. |
| | | 11.40 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

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Emissions Unit ID: P042

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the small elgin can filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive materials are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of each product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R);**
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 0.5 on the basis that the material is loaded into a clean container
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

** Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. On days when any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

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organic compound emissions exceeded 4.8 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. On days when any photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.

- c. On days when only non-photochemically reactive material was packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 62.50 lbs/day and the actual average hourly organic compound emissions for each such day.

- 2. The permittee shall submit annual reports to the Director (Ohio EPA District Office or local air agency) for the elgin can filler which summarizes the actual annual OC emissions for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

4.8 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based on record keeping specified in Section III.1 of this permit.

b. Emission Limitation-

40 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit

c. Emission Limitation-

62.50 lbs OC/day during any day on which only non-photochemically material is packaged

Applicable Compliance Method-
Compliance shall be determined in accordance with the record keeping in Section III.1 of this permit.

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d. Emission Limitation-

11.40 TPY OC

Applicable Compliance Method-

Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the daily organic compound emission rate (lbs), and divided by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P042 - Small Elgin Can Filler located at the Packaging Line for Contact Cements and Mastics | | Compliance with Air Toxics Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P042) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

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TLV (ug/m3): 188,400

Maximum Hourly Emission Rate (lbs/hr): 4.23

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 135.8

MAGLC (ug/m3): 4485.0

Pollutant: Methanol

TLV (ug/m3): 262,090

Maximum Hourly Emission Rate (lbs/hr): 1.40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.13

MAGLC (ug/m3): 6240

Pollutant: MEK

TLV (ug/m3): 589,770

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 33.32

MAGLC (ug/m3): 14,042

Pollutant: Hexane

TLV (ug/m3): 176,200

Maximum Hourly Emission Rate (lbs/hr): 3.79

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123

MAGLC (ug/m3): 41,952

Physical changes to or changes in the method of operation of the emissions unit that 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.)
2. 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 be 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.

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.

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IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P043 - 55-Gallon Drum Filler located at the Packaging Line for Contact Cements | OAC rule 3745-31-05(A)(3) | 4.8 lbs organic compound (OC)/hr, and 115.72 lbs OC/day for each day when only non-photochemically reactive materials are packaged |
| | | 4.8 lbs OC/hr, 40 lbs/day for each day when any photochemically reactive materials are packaged. |
| | | 21.16 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the 55-gallon drum filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive materials are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of each product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R)**;
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 0.5 on the basis that the material is loaded into a clean container
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

** Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. On days when any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

organic compound emissions exceeded 4.8 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. On days when any photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.

- c. On days when only non-photochemically reactive materials were packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 115.72 lbs/day and the actual average hourly organic

compound emissions for each such day.

- 2. The permittee shall submit annual reports to the Director (Ohio EPA District Office or local air agency) for the elgin can filler which summarizes the actual annual OC emissions for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

4.8 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit.

b. Emission Limitation-

40 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit.

c. Emission Limitation-

115.72 lbs OC/day during any day on which

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only non-photochemically reactive material is packaged.

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit.

d. Emission Limitation-

21.16 TPY OC

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the daily organic compound emission rate (lbs), divided by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P043 - 55-Gallon Drum Filler located at the Packaging Line for Contact Cements | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P043) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

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TLV (ug/m³): 188,400

Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 135.8

MAGLC (ug/m³): 4485.0

Pollutant: Methylene Chloride

TLV (ug/m³): 173,680

Maximum Hourly Emission Rate (lbs/hr): 10.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 330.6

MAGLC (ug/m³): 4135

Pollutant: Hexane

TLV (ug/m³): 176,200

Maximum Hourly Emission Rate (lbs/hr): 3.79

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 123

MAGLC (ug/m³): 41,952

Physical changes to or changes in the method of operation of the emissions unit that 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

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(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.)
2. 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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. 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> |
|---|--------------------------------------|--|
| P044 - 5-Gallon Pail Filler located at the Packaging Line for Contact Cements | OAC rule 3745-31-05(A)(3) | 5.4 lbs organic compound (OC)/hr, and 115.9 lbs OC/day for each day when only non-photochemically reactive materials are packaged |
| | | 5.4 lbs OC/hr, 40 lbs/day for each day when any photochemically reactive materials are packaged. |
| | | 21.15 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

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Emissions Unit ID: P044

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the 5-gallon pail filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive materials are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of each product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R)**;
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded

S = 0.5 on the basis that the material is loaded into a clean container

MW = vapor molecular weight (lb/lb-mole)

Q = volume of material loaded (gal)

T = temperature (R)

** Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. On days when any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

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organic compound emissions exceeded 5.4 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. On days when a photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.

- c. On days when only non-photochemically reactive materials were packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 115.9 lbs/day and the actual average hourly organic compound emissions for each

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such
day.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

5.4 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1.

b. Emission Limitation-

40 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit.

c. Emission Limitation-

115.9 lbs OC/day during any day on which only non-photochemically reactive material is packaged.

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1 of this permit.

d. Emission Limitation-

21.15 TPY OC

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the

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daily organic compound emission rate,
divided by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P044 - 5-Gallon Pail Filler located at the Packaging Line for Contact Cements | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P044) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m³): 188,400

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Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 135.8

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MAGLC (ug/m³): 4485.0

Pollutant: Methylene Chloride

TLV (ug/m³): 173,680

Maximum Hourly Emission Rate (lbs/hr): 10.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 330.6

MAGLC (ug/m³): 4135

Pollutant: MEK

TLV (ug/m³): 589,770

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 33.32

MAGLC (ug/m³): 14,042

Pollutant: Hexane

TLV (ug/m³): 176,200

Maximum Hourly Emission Rate (lbs/hr): 3.79

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 123

MAGLC (ug/m³): 41,952

Physical changes to or changes in the method of operation of the emissions unit that 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:

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- 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.)
2. 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 be 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.

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.

IV. Reporting Requirements

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Emissions Unit ID: P044

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. 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> |
|---|--------------------------------------|--|
| P045 - 4-Stem Prosys Filler | OAC rule 3745-31-05(A)(3) | 2.84 lbs/hr organic compound (OC)/hr, 69.62 lbs OC/day for each day when only non-photochemically reactive materials are packaged |
| | | 2.84 lbs OC/hr and 40 lbs/day for each day when any photochemically reactive materials are packaged. |
| | | 12.7 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the 4-Stem Prosys Filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive material are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of the product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R)**;
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 0.5 on the basis that the material is loaded into a clean container
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

** Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. On days when any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

organic compound emissions exceeded 2.84 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. On days when any photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.
- c. On days when only non-photochemically reactive materials were packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 69.62 lbs/day and the actual average hourly organic

compound emissions for each such day.

- 2. The permittee shall submit annual reports to the Director (Ohio EPA District Office or local air agency) for the 4-Stem Prosys Filler which summarizes the actual annual OC emissions for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

2.84 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1.

b. Emission Limitation-

40.0 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1.

c. Emission Limitation-

69.62 lbs OC/day during any day on which only non-photochemically reactive material is packaged

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Facility ID: 0855130356

Emissions Unit ID: P045

Applicable Compliance Method-
Compliance shall be determined in
accordance with the record keeping in
Section III.1.

d. Emission Limitation-

12.7 TPY OC

Applicable Compliance Method-
Compliance shall be based upon the record
keeping specified in Section III.1 of this
permit and shall be the summation of the
daily organic compound emission rate,
divided by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P045 - 4-Stem Prosys Filler | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P045) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m³): 188,400

Maximum Hourly Emission Rate (lbs/hr): 4.23

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Emissions Unit ID: P045

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 135.8

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MAGLC (ug/m³): 4485.0

Pollutant: Hexane

TLV (ug/m³): 176,200

Maximum Hourly Emission Rate (lbs/hr): 3.79

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 123

MAGLC (ug/m³): 41,952

Physical changes to or changes in the method of operation of the emissions unit that 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.)
2. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the

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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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P046 - 3-Stem Prosys Filler | OAC rule 3745-31-05(A)(3) | 5.16 lbs/hr organic compound (OC)/hr and 72.54 lbs OC/day for each day when only non-photochemically reactive materials are packaged.. |
| | | 5.16 lbs OC/hr and 40 lbs/day for each day when any photochemically reactive materials are packaged. |
| | | 13.24 TPY OC |
| | OAC rule 3745-21-07(G)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

- 1. Each day on which any photochemically reactive material (PRM) is employed in this emissions unit, the daily OC emissions shall not exceed 40 lbs/day.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information on a daily basis for the 3-Stem Prosys Filler :

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- a. the company identification for each product packaged;
- b. the number of hours of operation;
- c. for each day during which only non-photochemically reactive material are packaged, the number of gallons packaged;
- d. for each day during which a photochemically reactive material is packaged, the total number of gallons packaged;
- e. the calculated vapor pressure (psia) of each product packaged;
- f. the calculated vapor molecular weight (lb/lb-mole);
- g. the average temperature of the product packaged (R)**;
- h. the determination of the displacement emissions losses (lbs/day) for each product packaged, in accordance with the formulas and assumptions given in the "US EPA Emission Inventory Improvement Program Volume II: Chapter 8, Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", March 1998, for each product/day*;
- i. the summation of (h) for all products packaged each day;
- j. the average hourly emissions (i)/(b).

* Displacement = $(0.01246)(S)(P)(MW)(Q)/T$

Where:

P = vapor pressure of material loaded
 S = 0.5 on the basis that the material is loaded into a clean container
 MW = vapor molecular weight (lb/lb-mole)
 Q = volume of material loaded (gal)
 T = temperature (R)

** Based on the temperature of the product as it exits the mixer

IV. Reporting Requirements

1. In accordance with paragraph A.2.b of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. When any material (i.e. photochemically reactive material or non-photochemically material) was packaged, an identification of each day during which the average hourly

organic compound emissions exceeded 5.16 lbs/hr and the actual average hourly organic compound emissions for each such day.

- b. When a photochemically reactive material was packaged, an identification of each day during which the organic compound emissions exceeded 40.0 lbs/day and the actual average hourly organic compound emissions for each such day.

- c. On days when only non-photochemically reactive materials were packaged, an identification of each day during which the organic compound emissions from the packaging of the products exceeded 72.54 lbs/day and the actual average hourly organic

Emissions Unit ID: P046

compo
und
emissio
ns for
each
such
day.

- 2. The permittee shall submit annual reports to the Director (Ohio EPA District Office or local air agency) for the 3-Step Prosys Filler which summarizes the actual annual OC emissions for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

5.16 lbs OC/hr

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1.

b. Emission Limitation-

40.0 lbs OC/day during any day on which a photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be based on the record keeping specified in Section III.1.

c. Emission Limitation-

72.54 lbs OC/day during any day on which only non-photochemically reactive material is packaged

Applicable Compliance Method-
Compliance shall be determined in accordance with the record keeping in Section III.1.

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d. Emission Limitation-

13.24 TPY OC

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section III.1 of this permit and shall be the summation of the daily organic compound emission rate (lbs), divided by 2,000 pounds per ton.

VI. Miscellaneous Requirements

None

Modification Issued: 3/12/2002

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P046 - 3-Stem Prosys Filler | | Compliance with Air Toxic Policy |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit (P046) was evaluated based on the actual materials specified by the permittee in the permit to install application. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worse case" each pollutant(s):

Pollutant: Toluene

TLV (ug/m³): 188,400

Maximum Hourly Emission Rate (lbs/hr): 4.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 135.8

MAGLC (ug/m³): 4485.0

Pollutant: Hexane

TLV (ug/m³): 176,200

Maximum Hourly Emission Rate (lbs/hr): 3.79

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 123

MAGLC (ug/m³): 41,952

Physical changes to or changes in the method of operation of the emissions unit that 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,

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- 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.)
2. 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 be 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.

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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P047 - CC1 Mixer Powdered Mineral Bag Dump Station | OAC rule 3745-31-05(A)(3) | 0.20 lb/hr and 0.30 TPY particulate emissions Visible emissions of 5% opacity, as a 6-minute average |
| | OAC rule 3745-17-11(B)(1) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(A) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emission unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the amount of pigment handled in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation-

0.20 lb/hr particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum amount of pigment which may be handled in this emissions unit each hour (1680 lbs) by the AP-42 emissions factor of 20 pounds of particulate emissions/ton of pigment handled, Table 6.4-1(1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99). If required, compliance with this

Emissions Unit ID: P047

mass emission limitation shall be based on stack testing.

b. Emission Limitation-

0.30 TPY particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month summation of pigment handled by the AP-42 emission factor of 20 pounds of particulate emission/ton of pigment handled, Table 6.4-1 (1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99).

c. Emission Limitation-

5% visible emission, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined by visible emissions evaluations using the methods and procedures specified in USEPA Reference Method 9.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P047 - CC1 Mixer Powdered Mineral Bag Dump Station | | |

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Emissions Unit ID: P047

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P048 - Mastic Mixer Powdered Mineral Bag Dump Station | OAC rule 3745-31-05(A)(3) | 0.20 lb/hr and 0.30 TPY particulate emissions |
| | OAC rule 3745-17-11(B)(1) | Visible emissions of 5% opacity, as a 6-minute average |
| | OAC rule 3745-17-07(A) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emission unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the amount of pigment handled in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation-

0.20 lb/hr particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum amount of pigment which may be handled in this emissions unit each hour (1680 lbs) by the AP-42 emissions factor of 20 pounds of particulate emissions/ton of pigment handled, Table 6.4-1(1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99). If required, compliance with this

Emissions Unit ID: P048

mass emission limitation shall be based on stack testing.

b. Emission Limitation-

0.30 TPY particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month summation of pigment handled by the AP-42 emission factor of 20 pounds of particulate emission/ton of pigment handled, Table 6.4-1 (1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99).

c. Emission Limitation-

5% visible emission, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined by visible emissions evaluations using the methods and procedures specified in USEPA Reference Method 9.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| P048 - Mastic Mixer Powdered Mineral Bag Dump Station | OAC rule 3745-31-05 | |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P049 - CC2 Mixer Powdered Mineral Bag Dump Station | OAC rule 3745-31-05(A)(3) | 0.20 lb/hr and 0.30 TPY particulate emissions |
| | OAC rule 3745-17-11(B)(1) | Visible emissions of 5% opacity, as a 6-minute average |
| | OAC rule 3745-17-07(A) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emission unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the amount of pigment handled in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation-

0.20 lb/hr particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum amount of pigment which may be handled in this emissions unit each hour (1680 lbs) by the AP-42 emissions factor of 20 pounds of particulate emissions/ton of pigment handled, Table 6.4-1(1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99). If required, compliance with this mass emission limitation shall be based on stack testing.

b. Emission Limitation-

0.30 TPY particulate emissions

Applicable Compliance Method-

Compliance shall be determined by multiplying each 12-month summation of pigment handled by the AP-42 emission factor of 20 pounds of particulate emission/ton of pigment handled, Table 6.4-1 (1/95), dividing by 2000 lbs/ton, and multiplying by the control efficiency of 99% (1-0.99).

c. Emission Limitation-

5% visible emission, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined by visible emissions evaluations using the methods and procedures specified in USEPA Reference Method 9.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| P049 - CC2 Mixer Powdered Mineral Bag Dump Station | | |

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

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Modification Issued: 3/12/2002

Emissions Unit ID: P049

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None