



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
50 West Town Street, Suite 700  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL**

**LICKING COUNTY**

**Application No: 01-12189**

**Fac ID: 0145010427**

**DATE: 12/27/2007**

Samuel Strapping Systems

Jim Waterman

3900 Groves Road

Columbus, OH 43232

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
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	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

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

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

*Michael W. Ahern* 

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

CC: USEPA

CDO



Permit To Install  
Terms and Conditions

Issue Date: 12/27/2007  
Effective Date: 12/27/2007

**FINAL PERMIT TO INSTALL 01-12189**

Application Number: 01-12189  
Facility ID: 0145010427  
Permit Fee: **\$1000**  
Name of Facility: Samuel Strapping Systems  
Person to Contact: Jim Waterman  
Address: 3900 Groves Road  
Columbus, OH 43232

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**Central Ohio Aerospace Technology Ctr  
Heath, Ohio**

Description of proposed emissions unit(s):  
**Columbus line, electric oven, quench tank, coil costing dip tank, infrared oven and wax application.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director

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

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

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

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

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

The permittee shall submit required reports in the following manner:

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

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

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

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

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

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

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

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

**14. Construction Compliance Certification**

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

**15. Fees**

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

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

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

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

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
VOC	26.7

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

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

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

**Operations, Property, and/or Equipment - (K002) - Columbus Line - 10000 lb/hr Steel Strapping Coating Line with Electric Oven, Quench Tank, Coil Coating Tank, Infrared Oven, and Wax Application.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The Volatile Organic Compound (VOC) content as applied, of zinc coating shall not exceed 1.90 pounds of VOC per gallon, excluding water and exempt solvents. The VOC content, as applied, of any other coating shall not exceed 0.94 pounds of VOC per gallon excluding water and exempt solvents.</p> <p>VOC emissions from all surface coatings shall not exceed 6.1 pounds per hour.</p> <p>VOC emissions from all surface coatings and cleanup materials shall not exceed 26.7 tons per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(E) and 40 CFR Part 60, Subpart TT.</p>
OAC rule 3745-21-09(E)	The emission limitations specified in this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
40 CFR Part 60, Subpart TT	VOC emissions from all surface coatings shall not exceed 0.28 kilogram VOC per liter of coating solids applied, as a monthly volume-weighted average.

**2. Additional Terms and Conditions**

- 2.a The hourly VOC emission limitation represents the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or compliance method calculations are necessary to ensure compliance with this emission limitation.

**B. Operational Restrictions**

None

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

1. The permittee shall collect and record the following information each month for the coating line and shall maintain this information at the facility for a period of three years:

- a. the name and identification number of each coating, as applied;
- b. the mass of VOC per volume of each coating, excluding water and exempt solvents, as applied, calculated as follows:

$C_{VOC,2}$  is the VOC content in pounds of VOC per gallon of coating, excluding water and exempt solvents calculated as follows:

$$C_{VOC,2} = (D_C)(W_{VOC}) / V_S + V_{VOC}$$

where:

$D_C$  is the density of coating, in pounds of coating per gallon of coating.

$$W_{VOC} = W_{VM} - W_W - W_{ES}$$

$V_S$  is the volume fraction of solids in coating, in gallons of solids per gallon of coating.

$$V_{VOC} = V_{VM} - V_W - V_{ES}$$

$W_{VM}$  weight fraction of volatile matter in coating, in pound of volatile matter per pound of coating.

$W_W$  weight fraction of water in coating, in pound of water per pound of coating.

$W_{ES}$  weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating.

$V_{VM}$  volume fraction of volatile matter in coating, in gallon of volatile matter per gallon of coating.

$V_w$  volume fraction of water in coating, in gallon of water per gallon of coating.

$V_{ES}$  volume fraction of exempt solvent in coating, in gallon of exempt solvent per gallon of coating.

- c. the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied, using the following procedure:
- i. Calculate the mass of VOC's used ( $M_o + M_d$ ) during each calendar month for each affected facility by the following equation:



( $\sum L_{dj} D_{dj}$  will be 0 if no VOC solvent is added to the coatings, as received)

where:

$n$  is the number of different coatings used during the calendar month, and  
 $m$  is the number of different VOC solvents added to coatings used during the calendar month.

$L_c$  is the volume of each coating consumed, as received (liters).

$D_c$  is the density of each coating, as received (kilograms per liter).

$W_o$  is the proportion of VOC's in each coating, as received (fraction by weight).

$L_d$  is the volume of each VOC-solvent added to coatings (liters).

$D_d$  is the density of each VOC-solvent added to coatings (kilograms per liter).

- ii. Calculate the total volume of coating solids used ( $L_s$ ) in each calendar month for each affected facility by the following equation:



where:

$n$  is the number of different coatings used during the calendar month.

$V_s$  is the proportion of solids in each coating, as received (fraction by volume).

$L_c$  is the volume of each coating consumed, as received (liters).

- iii. Calculate the volume-weighted average mass of VOC's used per unit volume of coating solids applied ( $G$ ) during the calendar month by the following equation:

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- iv. Calculate the volume-weighted average of VOC emissions to the atmosphere ( $N$ ) during the calendar month by the following equation:

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2. The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
- a. the name and identification of each cleanup material employed;
  - b. the VOC content of each cleanup material, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the number of gallons (excluding water and exempt solvents) of each coating employed; and
  - e. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons.

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

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings.

The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall also identify, record, and submit a written report every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids is greater than the limit specified in Section A. If no such instances have occurred during a particular quarter, a report stating this shall be submitted semiannually.

## **E. Testing Requirements**

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

The Volatile Organic Compound (VOC) content as applied, of zinc coating shall not exceed 1.90 pounds of VOC per gallon, excluding water and exempt solvents. The VOC content, as applied, of any other coating shall not exceed 0.94 pounds of VOC per gallon excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Part II.C.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests conducted in accordance with 40 CFR Part 60, Appendix A, Method 24.

- b. Emissions Limitation:

VOC emissions from all surface coatings shall not exceed 6.1 pounds per hour.

Applicable Compliance Method:

The hourly VOC emission limitation represents the potential to emit for this emissions unit and was derived using the maximum VOC coating content limitation (0.94 pounds of VOC per gallon of coating, excluding water and exempt solvents) at the emissions unit's maximum application rate (6.5 gallons of coating/hr). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

- c. Emissions Limitation:

VOC emissions from all surface coatings and cleanup materials shall not exceed 26.8 tons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Part II.C.1-2.

d. Emissions Limitation:

VOC emissions from all surface coatings shall not exceed 0.28 kilogram VOC per liter of coating solids applied, as a monthly volume-weighted average.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Part II.C.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests conducted in accordance with 40 CFR Part 60, Appendix A, Method 24.

**F. Miscellaneous Requirements**

None

**Samuel Strapping Systems**  
**PTI Application: 01-12189**  
**Issued: 12/27/2007**

**Facility ID: 0145010427**

SIC CODE 3499 SCC CODE \_\_\_\_\_ EMISSIONS UNIT ID K002

EMISSIONS UNIT DESCRIPTION Colombus Line - Electric Oven, Quench Tank, Coil Coating Dip Tank, Infrared Oven, and Wax Application

DATE INSTALLED TBD

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds		6.11 lb/hr	26.8	6.11 lb/hr	26.8
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? \_\_\_\_\_ NESHAP? **TT** PSD? \_\_\_\_\_ OFFSET POLICY? \_\_\_\_\_

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

**Enter Determination**

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$NA

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES x NO

**Samuel Strapping Systems**

**PTI Application: 01-12189**

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**Facility ID:**

**0145010427**

IDENTIFY THE AIR CONTAMINANTS:

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