

**Synthetic Minor Determination and/or**  **Netting Determination**

Permit To Install **PTI 01-08262**

A. Source Description

Hamilton Tanks coats metal tanks in two existing booths and installed third booth for small metal tanks. The D&L 6594 red oxide primer used to coat the tanks in booth K002 has a xylene content of 0.98 lbs/gallon.

B. Facility Emissions and Attainment Status

Hamilton Welding currently has a maximum potential to emit of 20 tons HAP per year from two booths based upon usage restrictions . A complete PTE analysis for existing booths K001 and K002 is found in the following table:

Maximum hourly emission rate in lbs.			PTE in tons based upon restrictions		
VOC	Single HAP	Total HAP	VOC	Single HAP	Total HAP
40	20	24.4	20	3.5	20

Franklin County is an attainment area for all criteria pollutants.

C. Source Emissions

Total potential emissions for the small tank coating booth K003 emission units included in the above referenced synthetic minor PTI result in a PTE annual emissions described in the table below.

Pollutant	VOC	Single HAP	Total HAP
PTE annual emissions from K003 small tank coating line.	11.6	3.7	4.0

The above table shows that the annual usage restriction of 7,270 gallons for coating to meet the allowable emissions of 3.7 ton xylene/yr and 11.6 ton VOC/yr maintains the facility below the Title V threshold.

D. Conclusion

The operation of emission unit K003, in accordance with the coating usage and VOC content restrictions will result in maximum annual facility emissions below those levels which trigger Title V permitting requirements.

The proposed synthetic minor includes federally enforceable limits, recordkeeping, and reporting requirements to ensure continued compliance with the permit requirements. Given that the booth will be coating tanks previously coated in K001 and that the reported annual coating usage in K001 during 2000 was less than the annual usage restriction proposed for K003, this permit does not contain tables for the initial twelve months of operation.

State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
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: DRAFT PERMIT TO INSTALL  
FRANKLIN COUNTY  
Application No: 01-08262**

**CERTIFIED MAIL**

**DATE:** 9/20/2001

Hamilton Welding Company  
Randy Smith  
2200 Refugee Rd  
Columbus, OH 43207

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

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,



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

cc: USEPA

CDO



**Permit To Install**

**Issue Date: To be entered upon final issuance**

**Terms and Conditions**

**Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 01-08262**

Application Number: 01-08262

APS Premise Number: 0125041287

Permit Fee: **To be entered upon final issuance**

Name of Facility: Hamilton Welding Company

Person to Contact: Randy Smith

Address: 2200 Refugee Rd  
Columbus, OH 43207

Location of proposed air contaminant source(s) [emissions unit(s)]:

**2200 Refugee Rd  
Columbus, Ohio**

Description of proposed emissions unit(s):

**Small tank spray room.**

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

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

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

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

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

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

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

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

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

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

**10. Public Disclosure**

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

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**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**

- 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.

#### 14. Construction Compliance Certification

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

#### 15. Fees

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

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

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	11.6
Xylene	3.7

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K003 - Small metal tank coating line vented to fibreglas filter	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 9.45 pounds per hour, excluding cleanup materials, and 11.6 tons per year, including cleanup materials. See section A.2.a, A.2.b and A.2.c below.</p> <p>The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d) and OAC rule 3745-17-07(A)(1).</p>
	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed twenty percent opacity, as a six minute average, from any stack, except as provided by rule.
	OAC rule 3745-31-05(D)	See sections A.2.b, A.2.d, B.1 and B.2 below.

2. **Additional Terms and Conditions**

- 2.a The 9.45 lbs VOC/hr limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

- 2.b** Xylene emissions shall not exceed 3.7 tons per rolling, 12-month period.
- 2.c** Each emissions unit will be operated and maintained in accordance with manufacturers recommendations. Spray booth exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
- 2.d** The emissions of hazardous air pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units K001, K002 and K003 combined, shall not exceed 10.0 tons per year for an individual HAP and 25 tons per year for any combination of HAPs, per rolling, 12-month period.

**B. Operational Restrictions**

- 1. The maximum annual coating usage for this emissions unit shall not exceed 7,270 gallons.
- 2. The maximum monthly cleanup usage for this emissions unit shall not exceed 3 gallons.
- 3. The maximum xylene content shall not exceed 0.98 pound per gallon of coating applied and 7.2 pounds per gallon of cleanup material.
- 4. The permittee shall operate the dry filtration system, whenever this emissions unit is in operation.

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

- 1. The permittee shall collect and record the following information for each day in which coatings were applied, for the purposes of determining the monthly VOC and HAP emission rate:
  - a. the name and identification number of each coating, as applied;
  - b. the number of gallons of each coating employed during the day;
  - c. the VOC content of each coating (excluding water and exempt solvents), as applied;
  - d. the individual HAP content (in pounds per gallon) of each coating employed; and
  - e. the combined HAP content (in pounds per gallon) of each coating employed.
- 2. The permittee shall collect and record the following information for each month for the purpose of determining annual VOC and HAP emissions:
  - a. the name and identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;

- c. the VOC content of each cleanup material, in pounds per gallon;
- d. the individual HAP content of each cleanup material, in pounds per gallon;
- e. calculation of the individual monthly HAP emission rate (i.e., the sum of the products of the figures from items (1.b) and (1.d) and (2.b) and (2.d));
- f.. calculation of the total individual HAP emissions for each HAP for all coatings and cleanup materials employed, in pounds or tons per month and summation of rolling, twelve-month individual HAP emission rate (summation of item (e) for the current month plus the previous 11-month emission rates, above).
- g. calculation of the total combined HAP emissions for all HAPs for all coatings and cleanup materials employed, in pounds or tons per month and summation of rolling, twelve-month combined HAP emission rate (summation of item (f) for the current month plus the previous 11-month emission rate, above).

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

- 3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
- 4. The permit to install for this emissions unit K003 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Xylene

TLV (mg/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 9.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,001

MAGLC (ug/m3): 10,333

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be

satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy”:

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

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

1. The permittee shall notify the Central District Office in writing of the following:
  - a. any monthly record showing the use of noncomplying coatings or cleanup materials; and
  - b. any daily record showing that the dry filtration system was not in service when the emissions unit was in operation.

The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

2. In accordance with the General Terms and Conditions of this permit, the permittee shall submit quarterly deviation (excursion) reports for the following:
  - a. all exceedances of the annual coating usage restriction, as specified in section B.1 above;
  - b. all exceedances of the monthly cleanup material usage restriction, as specified in section B.2, above;
  - c. all exceedances of coating content restriction for xylene, as specified in section B.3 above.
3. The permittee shall submit annual reports which identify any exceedances of the annual coating and cleanup usage limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

- 1 Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emissions Limitation:  
VOC emissions shall not exceed 9.45 pounds per hour, excluding cleanup material.  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of section C.1 above.
  - b. Emission Limitation:  
VOC emissions shall not exceed 11.6 tons per year, including cleanup.  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of section C.2 above.  
$$7,270 \text{ gal coating/yr} * 3.15 \text{ lbs VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 11.45 \text{ tons VOC/yr}$$
$$3 \text{ gal cleanup/mo} * 12 \text{ mo/yr} * 7.2 \text{ lb VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 0.13 \text{ ton VOC/yr.}$$
  - c. Emission Limitation:  
Xylene emissions shall not exceed 3.7 tons per rolling, 12-month period.  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements specified in section C.1 of this permit.
  - d. Emission Limitation:  
3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for miscellaneous metal coatings regulated under paragraphs (U)(1)(d) OAC rule 3745-21-09.

**Applicable Compliance Method:**

Compliance shall be based upon the record keeping requirements specified in Section C. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

e. **Emission Limitation:**

Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

**Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance with the opacity limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 9, as such appendix existed on July 1, 1996, and OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

**None**

PTI Number: 01-08262

Facility ID: 0125041287

FACILITY NAME Hamilton Welding Company

FACILITY DESCRIPTION Small tank spray room. CITY/TWP Columbus

SIC CODE 3443 SCC CODE 4-02-025-33 EMISSIONS UNIT ID K003

EMISSIONS UNIT DESCRIPTION Small metal tank coating line vented to fiberglas filter

DATE INSTALLED 5/2000

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	Attainment				
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	Attainment			9.1	11.6
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Xylene			2.94	3.7

APPLICABLE FEDERAL RULES:

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

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

**Enter Determination:** Compliance with applicable rules, the Ohio air toxic policy, annual usage restriction and use of fiberglas filter.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

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

**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\*? x YES \_\_\_\_\_ NO \_\_\_\_\_

IDENTIFY THE AIR CONTAMINANTS: xylene, ethyl benzene

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner, AQM&P, DAPC, Central Office, and electronic files to [airpti@epa.state.oh.us](mailto:airpti@epa.state.oh.us)**

*Please fill out the following. If the checkbox does not work, replace it with an 'X'*

<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
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**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08262

Facility ID: 0125041287

FACILITY NAME Hamilton Welding Company

FACILITY DESCRIPTION Small tank spray room.

CITY/TWP Columbus

<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

**NSR Discussion**

PTI 01-08262

**General Information**

Hamilton Welding fabricates and paints steel tanks at 2200 Refugee Rd. in Columbus. Hamilton operates two coating booths K001 - metal parts coating with fiberglass/styrene resin and K002- metal parts coating with solvent based coating. Hamilton installed a third booth K003 in June 2000 - for metal parts coating of home heating oil tanks.

**Applicable Rules****OAC rule 3745-31-05(A)(3) -**

The proposed permit is based on application of an iron oxide primer at a 3.15 pounds VOC/gallon coating content at 3 gallons per hour resulting in 9.45 lb VOC/hr allowable. The booth controls overspray and is vented to a fiberglass filter emitted from a stack above the roof line. The xylene content was calculated at 1.0 pound of VOC per gallon of coatings, however, 9.1 lbs VOC/hr was modeled to determine compliance with the Ohio Toxic policy because additional solvents in the red oxide primer have listed TLVs. Hamilton Welding has existing permit allowables of 3.5 ton styrene as VOC/yr from K001 and 16.5 ton VOC/yr from K002, therefore, this permit restricts xylene emissions to 3.7 tons/yr to maintain combined HAP emissions to less than 25 tons per year facility-wide.

**OAC rule 3745-21-09(U)(1)(d) -**

For coating of miscellaneous metal parts under OAC rule 3745-21-09(U)(d), the VOC content is restricted to 3.5 lb VOC/gallon. The application lists a VOC content of 3.0 lbs VOC/gallon for D&L 6594 red oxide and 3.15 lbs VOC/gallon for Gateway P1852 red oxide primer.

**Calculations -**

3.15 lbs VOC/gallon \* 3 gallons/hr = 9.45 lb VOC/hr

3.15 lbs VOC/gallon \* 7,270 gallons/yr \* 1ton/2,000 pounds = 11.45 ton/yr

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08262

Facility ID: 0125041287

FACILITY NAME Hamilton Welding CompanyFACILITY DESCRIPTION Small tank spray room.CITY/TWP Columbus

$$7.2 \text{ lbs xylene} * 36 \text{ gallons xylene solvent/yr} * 1 \text{ ton}/2,000 \text{ pounds} = 0.13 \text{ tons/yr}$$

$$0.98 \text{ lb xylene/gallon coating} * 7,270 \text{ gallons/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 3.56 \text{ tons/yr}$$

$$0.13 \text{ ton xylene/yr} + 3.56 \text{ ton xylene/yr} = 3.69 \text{ ton xylene/yr}$$
**Fee Explanation -**

A fee of \$400.00 is based on no process weight rate and installing the booth prior to submitting the permit application..

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

**Synthetic Minor Determination and/or**  **Netting Determination**  
Permit To Install **PTI 01-08262**

**A. Source Description**

Hamilton Tanks coats metal tanks in two existing booths and installed third booth for small metal tanks. The D&L 6594 red oxide primer used to coat the tanks in booth K002 has a xylene content of 0.98 lbs/gallon.

**B. Facility Emissions and Attainment Status**

Hamilton Welding currently has a maximum potential to emit of 20 tons HAP per year from two booths based upon usage restrictions. A complete PTE analysis for existing booths K001 and K002 is found in the following table:

Maximum hourly emission rate in lbs.			PTE in tons based upon restrictions		
VOC	Single HAP	Total HAP	VOC	Single HAP	Total HAP
40	20	24.4	20	3.5	20

Franklin County is an attainment area for all criteria pollutants.

**C. Source Emissions**

Total potential emissions for the small tank coating booth K003 emission units included in the above referenced synthetic minor PTI result in a PTE annual emissions described in the table below.

Pollutant	VOC	Single HAP	Total HAP
PTE annual emissions from K003 small tank coating line.	11.6	3.7	4.0

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The above table shows that the annual usage restriction of 7,270 gallons for coating to meet the allowable emissions of 3.7 ton xylene/yr and 11.6 ton VOC/yr maintains the facility below the Title V threshold.

**D. Conclusion**

The operation of emission unit K003, in accordance with the coating usage and VOC content restrictions will result in maximum annual facility emissions below those levels which trigger Title V permitting requirements.

The proposed synthetic minor includes federally enforceable limits, recordkeeping, and reporting requirements to ensure continued compliance with the permit requirements. Given that the booth will be coating tanks previously coated in K001 and that the reported annual coating usage in K001 during 2000 was less than the annual usage restriction proposed for K003, this permit does not contain tables for the initial twelve months of operation.

**Please complete:**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	11.6
Xylene	3.7

**NEW SOURCE REVIEW FORM B**

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