OhioEPA

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: 01-08229

DATE: 7/31/2001

CERTIFIED MAIL

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

Plating Technology Advanced Coating Equi
David Boogaard
Post Office Box 06236 800 Frebis Ave
Columbus, OH 43206

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 of 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

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

CC: **USEPA** **CDO**

DRAFT PERMIT TO INSTALL 01-08229

Application Number:	01-08229
APS Premise Number:	0125042440
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Plating Technology Advanced Coating Equi
Person to Contact:	David Boogaard
Address:	Post Office Box 06236 800 Frebis Ave Columbus, OH 43206

Location of proposed air contaminant source(s) [emissions unit(s)]:
1415 S 22nd St
Columbus, **Ohio**

Description of proposed emissions unit(s):
Electrocoat painting line.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements 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 <u>obtained before</u> 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

Pollutant	Tons Per Year
VOC	**10.9**
Total HAP	**6.8**

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K001 - Electrocoat line for miscellaneous metal parts coating with electric drying oven	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 5.25 pounds per hour and 10.9 tons per year. See A.2.a and A.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) .
	OAC rule 3745-31-05(D)	See sections A.2.b, B.1 and B.2 below.
	OAC rule 3745-21-09(U)(1)(i)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.2.c below.

2. Additional Terms and Conditions

2.a The 5.25 pounds VOC per hour limitations for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limit.

2.b The emissions of hazardous air pollutant emissions (HAP) from this emissions unit shall not exceed 6.8 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

2.c The VOC content of the coating, as applied, shall not exceed 0.39 pounds per gallon.

B. Operational Restrictions

1. The hazardous air pollutant (butyl cellosolve) content of the coating shall not exceed 0.26 lbs HAP/gallon (3.5% by volume).

2. The emissions of HAPs, as defined in Section 112(b) of the Clean Air Act, from emissions units K001 and the exempt dip-spin line 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.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the line:

   a. the name and identification number of each coating or cleanup material, as applied;

   b the VOC content of each coating or cleanup material (excluding water and exempt solvents), as applied;

   c. the individual HAP content of each HAP in each coating or cleanup material in pounds of individual HAP per gallon of coating, as applied;

   d. the total combined HAPs content of each HAP in each coating or cleanup material in pounds of combined HAP per gallon of coating, as applied;

   e. the number of gallons of each coating or cleanup material employed during the month;

   f. the total individual HAP emissions for each HAP for all coatings or cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12-month period [for each HAP, the product of items (c) times (e) and the sum of the emissions for this month plus the previous 11 months]; and

   g. the total combined HAP emissions for all coatings employed, in pounds or tons per month and pounds or tons per rolling, 12-month period [the product of items (d) times (e) and the sum of the emissions for this month plus the previous 11 months].

   A listing of HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting you 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.

2. The permit to install for this emissions unit K001 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: 2-butoxyethanol
TLV (mg/m3): 121
Maximum Hourly Emission Rate (lbs/hr): 3.28
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 676
MAGLC (ug/m3): 2,880

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. In accordance with paragraph A. 2. b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports of the following:

   a. identify all coating analysis showing the butyl cellosolve content of the coating greater than 3.5% by volume (HAP content greater than 0.26 lbs/gallon); and

   b. identify all exceedances of the rolling, 12- month HAP emission rate specified in A.2.b and B.2, above; and

   c. each quarterly report shall include the date of each exceedance, the type of exceedance and the resultant increase in organic compound emissions, as well as any corrective actions that were taken to return to compliance.

2. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any monthly record showing (a) the use of noncomplying coatings, and/or (b) that the coating usage limitation was exceeded. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 30 days following the end of the calendar month.

3. The permittee shall also submit annual reports which specify the total VOC and HAP emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

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. Emission Limitation:
   The VOC content of the coating, as applied, shall not exceed 0.39 pound per gallon.

   Applicable Compliance Method:
   Compliance shall be based recordkeeping in C.1, formulation data and the following equation:
   Calculations using listed MSDS contents for the VOC and HAP contents for AF143 resin and monthly quality assurance analysis for butyl cellosolve in the coating ensure that the VOC content of 0.39 lb/gallon will not be exceeded. Dip tank samples of butyl cellosolve

not exceeding 3.5% by volume when multiplied times the formulation ratio of 1.13 lbs VOC/0.97 lbs butyl cellosolve equals 4.1% VOC by volume. Therefore, when the content does not exceed 3.5%, then (0.041 * 1,600 gallons) * 8.34 lbs VOC/gallon/1,600 gallons = 0.34 lbs VOC/gallon

USEPA Method 24 shall be used to determine the VOC contents for 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.

b. Emission Limitation:
The HAP (butyl cellosolve) content of the coating shall not exceed 0.26 lbs/gallon (3.5% by volume).

Applicable Compliance Method:
Compliance shall be determined by monitoring and record keeping specified in C.1. above.

c. Emission Limitation:
VOC emissions shall not exceed 5.25 pounds per hour.

Applicable Compliance Method:
Compliance is based on a theoretical maximum hourly application rate of 13.5 gallons of coating per hour and the following equation.
0.39 lb VOC/gallon * 13.5 gallons/hr = 5.25 lbs VOC/hr

d. Emission Limitation:
The VOC emissions shall not exceed 10.9 tons per year.

Applicable Compliance Method:
Compliance shall be determined by record keeping specified in C.1., the reporting required under section D.2. above, and the following equation assuming 80 hour work week:
5.25 lbs/hr * 4,160 hrs/week * 1 ton/2,000 lbs = 10.9 tons/yr

e. Emission Limitation:
Total HAP (butyl cellosolve) emissions shall not exceed 6.8 tons per year.

Applicable Compliance Method:
Compliance shall be determined by record keeping specified in C.1., the reporting required under section D.1. above, and the following equation assuming 80 hour work week:
3.28 lbs/hr * 4,160 hrs/week * 1 ton/2,000 lbs = 6.8 tons/yr

F. **Miscellaneous Requirements**

1. The following section of this permit are federally enforceable: A, B, C.1 and D.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus

SIC CODE 3471 SCC CODE 4-02-025-33 EMISSIONS UNIT ID K001

EMISSIONS UNIT DESCRIPTION Electrocoat line with electric drying oven

DATE INSTALLED 9/2000

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment			5.25	9.9
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	butyl cellosolve 2-butoxyethanol				8.1

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, use of low VOC content coating, and compliance with operational restriction and Ohio toxic policy.

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 contaiminants 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: 2- butoxyethanol @ 3.28 lb/hr

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus

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**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	☒	0000000**c**.wpd	☐	
Modeling form/results	☐	0000000**s**.wpd	☒	☐
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☐	☒
BAT Study	☐	0000000**b**.wpd	☐	☒
Other/misc.	☐	0000000**t**.wpd	☐	☒

* 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 01-08229

General Information

Plating Technology submitted a permit to install application for dip coating small metal bolts and screws. The metal parts are conveyed through two prerinse tanks, a 1,600 gallon electrodeposition tank, and two rinse tanks and through an electric drying oven. The MSDS sheet lists undiluted AF143 resin as having 1.13 lbs VOC/gallon and 0.97 lbs HAP/gallon, which when diluted with three gallons of water yields maximum contents of 0.39 lbs VOC/gallon and 0.32 lb HAP/gallon. Based on emission data for the first six months of operation, the E-coat line applied a maximum of 161 gallons of coating during 2 8 hour shifts. Plating Technology currents analyzes coating samples for ph, solids content and butyl cellosolve content to ensure 3.5% by volume (0.26 lb/gallon) is not exceeded.

Applicable Rules

OAC rule 3745-31-05(A)(3) -

Plating Technology proposed an hourly allowable of 5.25 lb VOC/hr based on the maximum potential to coat and dry the metal parts. Because the coating solution is monitored to ensure the a stable solids content, CDO proposes to base compliance on monthly coating analysis for butyl cellosolve (HAP content) to not exceed 3.5% by volume of coating applied.

The application included a compliance demonstration with the Ohio toxic policy using screen 3 at an hourly emission rate of 3.28 lb 2-butoxyethanol/hour from the oven stack. The MAGLC for 2 butoxyethanol is 121mg/m3/42 * 1000 ug/mg = 2881 ug/m3 compared to the maximum ground level concentration of 676 ug/m3.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus

OAC rule 3745-31-05(D) -

Plating Technology proposes to limit annual allowable HAP emissions to less than the Title V threshold of 9.9 tons single HAP per year. Compliance will be determined based on monthly calculations of HAP emission rates based on tank addition of 143 resin, 144 paste and NA-101 solvent and periodic analysis for butyl cellosolve content.

OAC rule 3745-21-09(U)(1)(i) -

For coating of miscellaneous metal parts under OAC rule 3745-21-09(U)(1), the VOC content is restricted to 3.0 lb VOC/gallon. The application lists RACT content of 2.18 lbs VOC/gallon, minus water and exempt solvents.

Calculations -

3.5% butyl cellosolve (HAP) by volume * 1,600 gallon dip tank = 56 gallon total * 7.5 lb/gallon =420 lb
420 lbs butyl cellosolve/1,6000 gallon coating in dip tank = 0.26 lb butyl cellosolve/gallon coating

5.25 lbs VOC/hr * 4,160 hrs/hr (5days/16 hours) * 1 ton/2,000 lbs = 10.9 tons VOC/yr
3.28 lbs HAP/hr * 4,160 hrs/hr (5days/16 hours) * 1 ton/2,000 lbs = 6.8 tons HAP/yr

Fee Explanation -

The minimum fee of $200.00 should be doubled because source initiated operation prior to permit issuance.

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 01-08229**

A. Source Description

Plating Technology, located in Columbus, operates a small dip-coating line for coating metal parts with a water-based ink that is a deminimis exempted source. That coating line has the maximum potential to emit of 0.35 ton HAP/yr. This permit to install application is for another water-based dip coat line which employs a single specialty coating for which samples are collected daily to ensure consistent content. The application proposes federally enforceable limits on a single HAP emissions (2-butoxyethanol - butyl cellosolve) to less than 9.9 tons per year. The proposed synthetic minor permit for K001, an electrocoating dip tank with electric drying oven, will effectively restrict the facility's potential to emit (PTE) to below those levels which trigger Title V permitting requirements.

Plating Technology dip coats metal bolts and screws for the automotive manufacturing industry in two water-based dip coating lines.

B. Facility Emissions and Attainment Status

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus

Plating Technology currently has a current maximum potential to emit of less than 10 tons VOC per year based upon the maximum hourly emission rate and 8,760 hours of operation per year. A complete PTE analysis from the exempt dip-spin machine is found in the following Table:

Maximum hourly emission rate in lbs.			PTE in tons based upon 8,760 hrs/yr.		
VOC	Single HAP	Total HAP	VOC	Single HAP	Total HAP
0.31	0.08	0.08	1.4	0.35	0.35

Franklin County is an attainment area for all criteria pollutants.

C. Source Emissions

Total potential emissions for Plating Technology's emissions unit 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 K001/exempt dip tank	12.3 tons	7.2 tons	7.2 tons

The above table shows that operating the e-coat for two shift per day during 5 day work weeks at the maximum hourly emission rate for as-applied coating to meet the annual allowable of 6.8 tons HAP/yr and 10.9 ton VOC/yr which is below the Title V threshold.

D. Conclusion

The operation of emission unit K001, in accordance with the 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 the monthly usage restriction and the use of a water based coating, this permit does not contain tables for the initial twelve months of operation.

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

Please complete:

SUMMARY (for informational purposes only)

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus

Pollutant	Tons Per Year
VOC	10.9
Total HAP	6.8

NEW SOURCE REVIEW FORM B

PTI Number: 01-08229 Facility ID: 0125040532

FACILITY NAME Plating Technology Advanced Coating

FACILITY DESCRIPTION Electrocoat painting line. CITY/TWP Columbus