



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/5/2012

Jeffrey Rabant
Areyway, Aquisitions, Inc.
8525 Clinton Rd.
Brooklyn, OH 44144

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1318105884
Permit Number: P0109230
Permit Type: Renewal
County: Cuyahoga

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director 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, made payable to "Ohio Treasurer Josh Mandel," 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

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: CDAQ



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Areway, Aquisitions, Inc.**

Facility ID:	1318105884
Permit Number:	P0109230
Permit Type:	Renewal
Issued:	3/5/2012
Effective:	3/5/2012
Expiration:	2/28/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
Areway, Aquisitions, Inc.

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. L005, N-propyl bromide vapor degreaser 11
2. P007, Plating Line LN304 17

Authorization

Facility ID: 1318105884

Application Number(s): A0043442

Permit Number: P0109230

Permit Description: PTIO renewal for L005 and P007. This permit will serve as an administrative modification for L005 (vapor degreaser). The purpose of this permit is to reflect the solvent change for vapor degreaser (EU L005) from trichloroethylene (HAP) to n-propyl bromide (non-HAP). This permit will also serve as a renewal for the decorative chrome plating line (EU P007). Facility will be transitioning to non-TV.

Permit Type: Renewal

Permit Fee: \$0.00

Issue Date: 3/5/2012

Effective Date: 3/5/2012

Expiration Date: 2/28/2022

Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Areway, Aquisitions, Inc.
8525 Clinton Road
Brooklyn, OH 44144

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

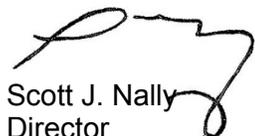
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Scott J. Nally
Director



Authorization (continued)

Permit Number: P0109230

Permit Description: PTIO renewal for L005 and P007. This permit will serve as an administrative modification for L005 (vapor degreaser). The purpose of this permit is to reflect the solvent change for vapor degreaser (EU L005) from trichloroethylene (HAP) to n-propyl bromide (non-HAP). This permit will also serve as a renewal for the decorative chrome plating line (EU P007). Facility will be transitioning to non-TV.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

L005

N-propyl bromide vapor degreaser
13-3146
Not Applicable

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

P007

Plating Line LN304
13-03335
Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Cleveland Division of Air Quality in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) B.2.
2. The following emissions units contained in this permit to 40 CFR Part 63, Subpart N, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks: P001, P002, P003 and P004. The complete NESHAP requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://ecfr.gpoaccess.gov> or by contacting the Cleveland Division of Air Quality (CDAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 63, Subpart N. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart N (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart N. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart N, and Subpart A.

C. Emissions Unit Terms and Conditions



1. L005, N-propyl bromide vapor degreaser

Operations, Property and/or Equipment Description:

Open-top vapor degreaser using n-propyl bromide

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-3146 issued on 11/12/1998	VOC emissions shall not exceed 1.36 lbs/hr and 5.94 tons/yr.
b.	OAC rule 3745-21-09(O)(3)	See b)(2), c)(1), c)(2), d)(1) and, e)(3).

(2) Additional Terms and Conditions

a. The open top vapor degreaser shall be equipped with and shall employ a cover and safety switches as described below:

i. the cover shall be installed so that it can be opened and closed easily without disturbing the vapor zone;

ii. a condenser flow switch and thermostat (or other such device) shall shut off the sump heat if the condenser coolant is either not circulating or too warm;

- iii. if using a spray application, a spray safety switch shall shut off the spray pump if the vapor level drops below any fixed spray nozzle;
 - iv. a vapor level control thermostat (or other such device) shall shut off the sump heat when the vapor level rises too high; and
 - v. a water flow switch or water pressure switch (or other such device) shall shut off the sump heat if the water in a water-cooled condenser has no flow or no pressure, whichever is being monitored.
- b. The open top vapor degreaser shall maintain a freeboard ratio greater than or equal to 0.75.
- c) Operational Restrictions
- (1) The open top vapor degreaser shall use only n-propyl bromide as the cleaning solvent.
 - (2) The open top vapor degreaser shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. the cover shall be kept closed at all times except when processing work loads through the degreaser;
 - b. solvent carry-out shall be minimized by:
 - i. racking parts so that solvent drains freely and is not trapped;
 - ii. moving parts in and out of the degreaser at less than 11 feet per minute;
 - iii. holding the parts in the vapor zone at least 30 seconds or until condensation ceases, whichever is longer;
 - iv. tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and
 - v. allowing parts to dry within the degreaser for at least 15 seconds or until visually dry, whichever is longer.
 - c. porous and/or absorbent materials shall not be cleaned;
 - d. workloads shall occupy no more than one-half of the degreaser's open-top area;
 - e. solvent spraying shall only be conducted within the vapor level;
 - f. solvent leaks shall be repaired immediately, or the degreased shall be shut down;
 - g. solvent waste shall only be stored in covered containers;
 - h. the degreaser shall be operated so that water cannot be visually detected in solvent exiting the water separator;

- i. no ventilation fans shall be used near the degreaser opening;
 - j. when the cover is open, the open top vapor degreaser shall not be exposed to drafts greater than 131 feet per minute, as measured between 3 and 6 feet upwind and at the same elevation as the tank lip;
 - k. if a lip exhaust is used on the open top vapor degreaser, the ventilation rate shall not exceed 65 cubic feet per minute per square foot of degreaser open area, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements; and
 - l. a permanent, conspicuous label, summarizing the operating procedures shall be posted on or near to the degreaser.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain records of the following information:
 - a. the types of solvents employed in the open top vapor degreaser, including the chemical name(s) and concentration;
 - b. a record of the freeboard ratio before and after each addition of make-up solvent and the date of the solvent addition;
 - c. any period of time in which the freeboard ratio is not maintained at 0.75 or greater; and
 - d. a record of the date and nature of any other maintenance activities for the freeboard ratio control.

These records shall be maintained for at least 5 years and shall be made available to the Cleveland Division of Air Quality upon verbal or written request.
 - (2) The permittee shall maintain records of the following information, collected at the end of each year:
 - a. the total cleaning solvent added to the open top vapor degreaser or the amount purchased for use in the emissions unit during the year;
 - b. the total amount of solvent collected for disposal and/or recovery and shipped off-site during the year; and
 - c. the estimated annual VOC emissions from this emissions unit, calculated using the difference between the solvent used or purchased and the used solvent shipped offsite, adjusting the units to calculate the emissions in tons/year.
- e) **Reporting Requirements**
- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Cleveland Division of Air Quality (CDAQ).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (3) The permittee shall include in the annual PER information documenting any period of time during which the freeboard was not maintained at a ratio of 0.75 or greater, and/or any period of time during which the open top vapor degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

VOC emissions shall not exceed 1.36 lbs/hr

Applicable Compliance Method:

The permittee shall quantify VOC emissions through a material balance test, conducted for a sufficient period of time to compute an average emission rate. The following procedures shall be implemented in order to perform this material balance test and document the average VOC emissions from this emissions unit, as follows:

 - i. the degreaser tank shall be cleaned before testing begins;
 - ii. records shall be maintained of the weight or volume of solvent used to initially fill the cleaning tank and the volume or weight of the make-up solvent added to the tank during the test period;
 - iii. at the end of the test period (which can coincide with the normal solvent replacement cycle) the used solvent shall be pumped or drained out of the tank and the volume or weight measured using the same method applied in "ii" above;
 - iv. a record shall be maintained of the time (hours) passing between filling the tank with fresh solvent (start of test period) to the removal of the waste solvent, as well as, the number of parts or weight of the work load cleaned during the test period;
 - v. a sample of the used solvent shall be analyzed for the percent oil, metal chips, and other contaminants (the oil and solvent proportions can be

estimated by weighing samples of used solvent before and after boiling off the solvent);

- vi. from the analysis of the used/waste solvent in "v", the volume or weight of oils, dissolved from the cleaned parts or work load, shall be documented;
- vii. the total VOC emissions from the cleaning tank during the test period shall be calculated* from the volume or weight of solvent displaced by the oil, plus the total makeup solvent added to the tank to the same initial fill line, and this volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the solvent; or
- viii. if the final solvent line is below the initial solvent line in the tank when the waste solvent is pumped or drained out, the total VOC emissions from the cleaning tank during the test period shall equal the measured volume or weight of fresh solvent used to initially fill the tank, minus the total volume or weight of used solvent pumped/drained out, plus the volume or weight of solvent displaced by the oil (calculated in "v" above), plus the volume or weight of makeup solvent added to the tank during the test period, and this total volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the degreasing solvent; or
- ix. as an alternative to the procedures for estimating VOC emission from the cleaning tank in "vii" or "viii" above, the VOC emissions may be calculated as the difference between the total volume of solvent added to the cleaning tank during the test period (the amount used to initially fill the tank and the makeup solvent added) and (minus) the solvent contained in the used solvent pumped or drained out; and this difference in volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the degreasing solvent;
- x. the average hourly VOC emission rate shall be calculated by dividing the total emissions calculated in "vii", "viii", or "ix" by the total hours of the test period (and/or divided by the total parts cleaned during the test period if an emissions per production rate is required) as recorded in "iv"; and
- xi. if waste solvents pumped from the solvent cleaning tank are not immediately sealed to prevent evaporation and if a record is not maintained of the volume or amount sent offsite for recovery and/or disposal, such waste solvent losses shall be included with those calculated above in any required emissions report(s) if it cannot be demonstrated that this volume of material has been properly recovered or disposed of and/or has not been lost through evaporation to the atmosphere.

* If solvent measurements are recorded by volume the density of the solvent shall be used to convert gallons to pounds.



b. Emission Limitation:

VOC emissions shall not exceed 5.94 tons/year

Applicable Compliance Method:

Compliance shall be determined based on the record keeping in d)(2).

g) Miscellaneous Requirements

(1) None.



2. P007, Plating Line LN304

Operations, Property and/or Equipment Description:

Decorative electroplating line with copper, nickel and chromium tanks controlled by a packed bed scrubber and composite mesh pad.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-03335 issued on 6/29/2004	Chromium emissions shall not exceed 0.0008 ton/yr. See b)(2)a. below.
b.	OAC rule 3745-17-07(A)(1)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11	The particulate emission limit specified by this rule is less stringent than the emission limit established by 40 CFR Part 63, Subpart N.
d.	40 CFR Part 63, Subpart N [In accordance with 40 CFR 63.340	Chromium emissions shall not exceed 0.01 mg/dscm (4.4 x 10 ⁻⁶ gr/dscf).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	this emission unit is an existing decorative chrome electroplating tank subject to the emissions limitations/control measures specified in this section.]	See section B.2. See c)(1), d)(1), e)(4), and f)(2) below.
e.	40 CFR 63.1-16	Appendix B to Subpart N of 40 CFR Part 63 – Applicability of General Provisions to Subpart N shows which parts of the General Provisions in 40 CFR 63.1-16 apply.

(2) Additional Terms and Conditions

- a. Visible particulate emissions from the stacks serving this emissions unit shall not exceed 5 percent opacity, as a 6-minute average.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(b)	Applicability of emissions limitations.
63.342(d)(1)	Total chromium concentration in exhaust gas stream limit.
63.342(d)(2)	Electroplating or anodizing bath surface tension requirements.
63.342(f)	Operation and maintenance practices and plan requirements, including requirements identified in Table 1 of §63.342.
63.342(g)	Chromic acid baths shall not be reduced from hexavalent to trivalent.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.343(a)	Compliance dates.
63.343(b)	Methods to demonstrate initial compliance.



63.343(c)(3)	Monitoring and recording pressure drop to demonstrate continuous compliance.
63.343(c)(5)	Use of fume suppressants and surface tension requirements.
63.343(c)(7)	Use of fume suppressant and add-on control device.
63.346(a)	Fulfill all record keeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Shall maintain records for a period of 5 years in accordance with §63.10(b)(1).
Table 1 to §63.342	Summary of operation and maintenance practices.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Cleveland Division of Air Quality (CDAQ).
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the packed-bed scrubber system during the 12-month reporting period for this/these emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the pressure drop was outside of the appropriate range or exceeded the applicable limit contained in this permit;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the composite mesh-pad system;
 - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the pressure drop into compliance with the appropriate range or

limit contained in this permit, was determined to be necessary and was not taken;
 and

- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

- (4) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.347(a)	Fulfill all reporting requirements identified in Subpart N and the applicable portions of Subpart A.
63.347(b)	Reporting requirements applicability.
63.347(c)	Initial notifications.
63.347(d)	Notification of performance test.
63.347(e)	Notification of compliance status.
63.347(f)	Reports of performance test results.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Chromium emissions shall not exceed 0.01 mg/dscm (4.4×10^{-6} gr/dscf).

Applicable Compliance Method:

If required, Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations” shall be used to determine the chromium concentration from the electroplating or anodizing tank.

- b. Emission Limitation:

Chromium emissions shall not exceed 0.0008 ton per year.

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined for each emissions unit by the following equation (based on AP-42, 5th Edition, Vol 1, Chapter 12.20, Electroplating):

$$Ea = (Ef) \times (Rc) \times (1 \text{ lb}/7000 \text{ grains}) \times (100 \text{ dscf}/\text{A-hr}) \times (\text{Hr}) \times (1 \text{ ton}/ 2000 \text{ lbs})$$

$$Ea = (1.2 \times 10^{-6} \text{ gr}/\text{dscf}) \times (5,000 \text{ A}) \times (1 \text{ lb}/7000 \text{ grains}) \times (100 \text{ dscf}/\text{A-hr}) \times (8760 \text{ hrs}/\text{yr}) \times (1 \text{ ton}/ 2000 \text{ lbs})$$

Where:

Ea = actual annual chromium emissions (ton per year)

Ef = emission factor for decorative chromium electroplating with fume suppressant (1.2×10^{-6} grains/dscf)

Rc = rectifier capacity in amps (5,000 A)

Hr = operating hours per year (8760 hrs/yr)

c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 5 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- (2) The permittee shall comply with the applicable testing methods under 40 CFR, Part 63 Subpart N, including the following sections:

63.344(a)	Performance test requirements.
63.344(c)	Test methods in accordance with §63.343(c)(1).
63.344(d)	Site specific operating parameter values.
63.344(e)	Emission limitation for multiple sources sharing pollution control device.

g) Miscellaneous Requirements

- (1) None.