



State of Ohio Environmental Protection Agency

Street Address:

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Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL  
MONTGOMERY COUNTY  
Application No: 08-04260**

**DATE: 5/8/2001**

B-N Plating  
Daniel Nock  
613 Daniel St  
Dayton, OH 454041637

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
X	SYNTHETIC MINOR
	CEMS
Subpart T	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	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 **\$200** 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

RAPCA



**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 08-04260**

Application Number: 08-04260

APS Premise Number: 0857040267

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

Name of Facility: B-N Plating

Person to Contact: Daniel Nock

Address: 613 Daniel St  
Dayton, OH 454041637

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

**613 Daniel St  
Dayton, Ohio**

Description of proposed emissions unit(s):

**vapor degreaser.**

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	3.63

**B-N Plating**

**PTI Application: 08-04260**

**Issued: To be entered upon final issuance**

**Facility ID: 0857040267**

**Emissions Unit ID: P003**

**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>
P003 - trichloroethylene open top vapor degreaser with freeboard refrigeration device and a freeboard ratio	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 63 Subpart T and OAC rule 3745-35-07(B)
	OAC rule 3745-35-07(B) Synthetic minor to avoid Title V	0.30 ton/month and 3.63 TPY volatile organic compounds (VOC)
	40 CFR Part 63 Subpart T	0.30 ton/month VOC (The emissions of trichloroethylene are equivalent to the VOC emissions.)
	OAC rule 3745-21-09(O)(3)	The permittee shall demonstrate that the solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pound per hour per square foot) of solvent/air interface area as determined using the procedures in 40 CFR 63.465 (a) and 40 CFR 63, Appendix A.  See A.2.a. through A.2.f.

**2. Additional Terms and Conditions**

- 2.a The permittee shall perform the following activities:

- i. Conduct an initial performance test to demonstrate compliance with the applicable idling emission limit and to establish parameters that will be monitored to demonstrate compliance.
  - ii. Conduct the periodic monitoring of the parameters used to demonstrate compliance as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.
  - iii. Operate the solvent cleaning machine within the parameters identified in the initial performance test.
- 2.b** The permittee shall ensure that the chilled air blanket temperature (in °F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.
- 2.c** The permittee shall maintain a freeboard with a freeboard ratio equal to 1.0 or greater.
- 2.d** The permittee shall comply with the following requirements:
  - i. Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.
  - ii. Ensure that the working-mode cover is maintained free of cracks, holes and other defects.
- 2.e** The permittee shall comply with the following requirements:
  - i. Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures outlined in the "Monitoring and/or Record keeping Requirements" section of this permit.
  - ii. Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less.
- 2.f** The permittee shall ensure that the solvent cleaning machine conforms to the following design requirements:
  - i. The solvent cleaning machine shall be designed or operated to meet the following control equipment or technique requirements:
    - (a) Use of an idling and downtime mode cover that shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place. The cover must be able to be readily opened or closed, must completely cover the cleaning

machine openings when in place, and must be free of cracks, holes and other defects.

OR

(b) Use of reduced room draft that ensures that the flow or movement across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time measured using the procedure described in the "Monitoring and/or Recordkeeping Requirements" section of this permit. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.

- ii. The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.
- iii. The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- iv. The solvent cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
- v. The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- vi. The solvent cleaning machine shall have a primary condenser.

**2.g** This emissions unit is exempt from the volatile organic compound limitations established in OAC rule 3745-21-09(O)(3) pursuant to OAC rule 3745-21-09(O)(6)(b).

## **B. Operational Restrictions**

- 1. The permittee shall meet all of the following required work and operational practices:
  - a. Control air disturbances across the solvent cleaning machine opening(s) by incorporating the following control equipment or techniques:
    - i. Cover(s) for the solvent cleaning machine shall be in place during the idling mode and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.

OR

- ii. The permittee shall employ a reduced room draft that ensures that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures described in the "Monitoring and/or Recordkeeping Requirements" section of this permit. The permittee shall also establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.
- b. The parts baskets or the parts being cleaned in solvent cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meter per minute (3 feet per minute) or less.
- c. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
- d. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Director (appropriate field Office or local air agency).
- e. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
- f. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
- g. During shutdown of the solvent cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
- h. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- i. The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Director (appropriate field Office or local air agency) to achieve the same or better results as those recommended by the manufacturer.

- j. The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR Part 63, Appendix B if requested during an inspection by the Director (appropriate field Office or local air agency).
  - k. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
  - l. Sponges, fabric, wood, and paper products shall not be cleaned.
2. The maximum monthly solvent usage for this emissions unit shall not exceed 50 gallons.

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

1. The permittee shall monitor the hoist speed as described below:
  - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
  - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
  - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
  - d. If the permittee can demonstrate to the satisfaction of the Director (appropriate District Office or local air agency) in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
  - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
  - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
  - c. Records of the halogenated HAP solvent content for the solvent used in the solvent cleaning

machine.

2. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
  - a. The results of control device monitoring required in this section of the permit.
  - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
  - c. Estimates of annual trichloroethylene consumption for the solvent cleaning machine.
3. The permittee shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test. These records shall be maintained for the lifetime of the solvent cleaning machine.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.
5. The permittee shall conduct monitoring and record the results on a monthly basis for the working-mode cover by conducting a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes and other defects.
6. The permittee shall conduct an initial monitoring test of the wind speed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:
  - a. Measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine as follows:
    - i. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
    - ii. Orient a velometer in the direction of the wind current at each of the four corners of the machine.
    - iii. Record the reading for each corner.
    - iv. Average the values obtained at each corner and record the average wind speed.
  - b. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.

7. The permittee shall maintain monthly records of the following information:
  - a. The number of gallons of trichloroethylene used.
  - b. The number of gallons of trichloroethylene disposed of as waste.
  - c. All control equipment maintenance.
  - d. The monthly VOC emission rate, in tons/month (See calculation methodology in E.1.a.)

**D. Reporting Requirements**

1. The permittee shall submit an initial notification report as soon as practicable before the construction or reconstruction is planned to commence. This report shall include all of the information required in 40 CFR 63.5 (d) (1) of subpart A, with the following revisions and additions:
  - a. The report shall include a brief description of the solvent cleaning machine type (batch vapor, batch cold, vapor in-line, or cold in-line), solvent/air interface area, and existing controls.
  - b. The report shall include the anticipated compliance approach for the solvent cleaning machine.
  - c. The report shall include an estimate of the annual trichloroethylene consumption for the solvent cleaning machine in lieu of the requirements of 40 CFR 63.5 (d) (1) (ii) (H), subpart A.
2. The permittee shall submit an initial statement of compliance no later than 150 days after startup. Each initial statement of compliance shall contain the following:
  - a. The name and address of the permittee.
  - b. The address (i.e., physical location) of the solvent cleaning machine.
  - c. A list of the control equipment used to achieve compliance.
  - d. A list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date for each piece of control equipment required to be monitored.
  - e. Conditions to maintain the wind speed requirements as described in the "Additional Terms and Conditions" section of this permit
3. The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:

- a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 63.463 (d) (10)."
  - b. An estimate of solvent consumption during the reporting period.
4. The permittee shall submit an exceedance report on a semiannual basis. If no operation conditions were established under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) and/or if the flow across the top of the freeboard area of the cleaning machine or within the solvent cleaning machine enclosure exceeded 15.2 meters/minute and no correction was made within 15 days of detection; and/or if the cover, when closed, did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or if the cover had cracks, holes or other defects and no correction was made within 15 days of detection; and/or if the temperature of the chilled air blanket, measured at the center of the air blanket, was greater than 30% of the solvent's boiling point, and no correction was made within 15 days of detection, the permittee shall begin to submit a quarterly report until such time that the permittee requests and receives approval of a less frequent reporting frequency from the Director (appropriate District Office or local air agency). The permittee may receive approval of less frequent reporting if the following conditions are met: (1) The emissions unit has demonstrated a full year of compliance without an exceedance, (2) the permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Director (appropriate District Office or local air agency) does not object to a reduced frequency of reporting for the affected emissions unit as provided in paragraph (e) (3) (iii) of subpart A, 40 CFR 63.1, General Provisions. Each exceedance report shall be delivered or post marked by the 30th day following the reporting period. Each exceedance report shall contain the following:
  - a. The reason and a description of the exceedance and action(s) taken to comply with 40 CFR 63.463 (e) and (f) including written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
  - b. If no exceedance has occurred, a statement to that effect shall be submitted.
5. The permittee shall submit a test report for tests of idling emissions meeting the specifications in Method 307 of 40 CFR Part 63, Appendix A. This report shall comply with the following requirements:
  - a. The test must be conducted on the same specific model solvent cleaning machine used at the facility. The test can be done by the permittee of the affected machine or can be supplied by the vendor of that solvent cleaning machine or a third party. If a solvent cleaning machine vendor or a third party test report is used to demonstrate compliance, the following requirements shall be met:
    - i. The report shall include the following for the solvent cleaning machine tested: name of person(s) or company that performed the test, model name, the date the solvent

cleaning machine was tested, serial number, and a diagram of the solvent cleaning machine tested.

- ii. The permittee shall comply with the following requirements:
  - (a) Submit a statement by the solvent cleaning machine vendor that the unit tested is the same as the unit the report is being submitted for.
  - (b) Demonstrate to the satisfaction of the Director (appropriate District Office or local air agency) that the trichloroethylene emissions from the solvent cleaning machine for which the test report is being submitted are equal to or less than the trichloroethylene emissions from the solvent cleaning machine in the vendor test report.

b. The report must clearly state the monitoring parameters, monitoring frequency and the delineation of exceedances for each parameter.

5. The permittee shall submit quarterly reports which identify any exceedances of the monthly solvent usage limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted in accordance with Section A.2. of the General Terms and Conditions of this permit.

**E. Testing Requirements**

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

a. Emission Limitation -  
0.30 ton/month VOC

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.7. To determine the actual organic compound emission rate, the following equation shall be used:

$$E = (Ls - Lw) \times D/2000$$

E = organic compound emission rate (ton/month)

Ls = liquid volume of solvent employed each month (gallons)

Lw = liquid volume of solvent sent off-site as waste (gallons)

D = density of solvent (pounds/gallon)

**B-N Plating**

**PTI Application: 08-04260**

**Issued: To be entered upon final issuance**

**Facility ID: 0857040267**

**Emissions Unit ID: P003**

- b. Emission Limitation -  
3.63 TPY VOC

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.7. and shall be the sum of the monthly VOC emission rates for the calendar year.

- c. Operational Limitation -  
50 gallons solvent/month

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.7.

- 2. The permittee shall determine the idling emission rate of the solvent cleaning machine using Reference Method 307 in 40 CFR part 63, Appendix A.
- 3. The permittee shall determine the facility's potential to emit (PTE) from all solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit shall be determined in accordance with the following procedures:
  - a. Determine the potential to emit for each individual solvent cleaning machine using the following equation:

$$PTE_i = H_i \times W_i \times SAI_i$$

Where:

$PTE_i$  = the potential to emit for the solvent cleaning machine  $i$  (kilograms solvent per year).

$H_i$  = hours of operation for solvent cleaning machine  $i$  (hours per year).

= 8760 hours per year, unless otherwise restricted by a federally enforceable requirement.

$W_i$  = the working mode uncontrolled emission rate (kilograms per square meter per hour).

= 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.

= 1.12 kilograms per square meter per hour for in-line cleaning machines.

$SAI_i$  = solvent/air interface area of solvent cleaning machine  $i$  (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent

/air interface. Cleaning machines that do not have a solvent area interface shall calculate a solvent/air interface area using the procedure in paragraph (b) below.

- b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation:

$$SAI = 2.2 * (Vol)^{0.6}$$

Where:

SAI = the solvent/air interface area (square meters).

Vol = the cleaning capacity of the solvent cleaning machine (cubic meters).

- c. Sum the PTE<sub>i</sub> for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

#### **F. Miscellaneous Requirements**

1. Sections A, B, C, D, and E above are federally enforceable.

**NEW SOURCE REVIEW FORM B**

PTI Number: 08-04260

Facility ID: 0857040267

FACILITY NAME B-N Plating

FACILITY DESCRIPTION plating and polishing CITY/TWP Dayton

SIC CODE 3471 SCC CODE 4-01-002-05 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION trichloroethylene open top vapor degreaser

DATE INSTALLED Upon PTI issuance

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	attainment	0.30 ton/month	3.63	0.30 ton/month	3.63
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? \_\_\_\_\_ NESHAP? 40 CFR Part 63 \_\_\_\_\_ PSD? \_\_\_\_\_ OFFSET POLICY? \_\_\_\_\_  
 Subpart T \_\_\_\_\_

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

**BAT is determined to be compliance with the applicable rules and specified mass emission limitations; solvent usage limitation; record keeping; and reporting.**

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

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\*? \_\_\_\_\_ YES X NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

**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**

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<i>Please fill out the following. If the checkbox does not work, replace it with an 'X'</i>	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0804260c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<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**

B-N Plating is located in Dayton, Montgomery County. This permit is for a new trichloroethylene open top vapor degreaser. This degreaser is replacing an older degreaser which does not comply with the requirements of 40 CFR Part 63 Subpart T. This new degreaser, P003, complies with the MACT by way of the idling emission standard with controls of a freeboard ratio of greater than 1.0, a freeboard refrigeration device, a working-mode cover, and reduced room draft.

Allowable emissions are based upon a maximum allowable solvent usage of 50 gallons/month. This results in emissions of 0.30 ton/month and 3.63 TPY VOC. The VOC and trichloroethylene (HAP) emissions are equivalent for this emissions unit. Using the potential to emit calculation specified in 40 CFR Part 63 Subpart T, the potential emissions from this degreaser are 13.9 TPY trichloroethylene. This is above the major source threshold of 10 TPY for an individual HAP. With the federally enforceable restrictions on the monthly solvent usage and monthly emission rate, the degreaser will be considered an area source for MACT purposes. It is recognized that in accordance with the December 14, 1999 Federal Register notice that area sources subject the halogenated solvent degreaser MACT standard (40 CFR Part 63 Subpart T) are deferred from the requirement to submit a Title V application until December 2005. While writing this PTI as a synthetic minor only delays the requirement to submit a Title V application, this is the best course of action for this facility. Therefore, in order to limit the potential to emit for this emissions unit below major source thresholds, a federally enforceable limitation is being established on the monthly solvent usage along with a monthly VOC/HAP emission limitation (Reference: June 13, 1989 memo on "Limiting Potential to Emit in New Source Permitting" from John Seitz).

BAT is determined to be compliance with the applicable rules and specified mass emission limitations; solvent usage limitation; record keeping; and reporting.

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 ENTER PTI NUMBER HERE**

**A. Source Description: B-N Plating is a plating and polishing facility located in Dayton, Montgomery County. The facility is installing one trichloroethylene open top vapor degreaser.**

**B. Facility Emissions and Attainment Status: Without federally enforceable restrictions, potential**

**NEW SOURCE REVIEW FORM B**

PTI Number: 08-04260

Facility ID: 0857040267

FACILITY NAME B-N Plating

FACILITY DESCRIPTION plating and polishingCITY/TWP Dayton

**emissions based upon the potential to emit calculation in 40 CFR Part 63 Subpart T are 13.9 TPY trichloroethylene. This facility is located in Montgomery County which is currently designated as attainment for all pollutants.**

- C. Source Emissions: With a restriction on the maximum monthly solvent usage and monthly emission rate, emissions are restricted to 0.30 ton/month and 3.63 TPY trichloroethylene. This is below the major source threshold of 10 TPY which would require the facility to obtain a Title V permit at this time. As an area source, this facility is deferred from the requirement to submit a Title V permit application until December 2005, as specified by the USEPA in a December 14, 1999 Federal Register Notice.**
- D. Conclusion: The monthly solvent usage limitation and emission rate serve as federally enforceable limits on the emissions of trichloroethylene to below major source thresholds. With the corresponding record keeping and reporting, compliance with these federally enforceable restrictions on the monthly solvent usage and trichloroethylene emission rate shall be ensured.**

**PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:**

**NONE**

**Please complete:**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	3.63

**NEW SOURCE REVIEW FORM B**

PTI Number: 08-04260

Facility ID: 0857040267

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CITY/TWP Dayton