State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
CUYAHOGA COUNTY
Application No: 13-03652

DATE: 12/5/2000

Adda Nickel Plating Services
Delores Norsic
7105 Krick Road
Walton Hills, OH 44146-0000

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

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

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: USEPA **CBAPC**

OhioEPA

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: December 5, 2000**
Terms and Conditions **Effective Date: December 5, 2000**

FINAL PERMIT TO INSTALL 13-03652

Application Number:	13-03652
APS Premise Number:	1318588243
Permit Fee:	**$400**
Name of Facility:	Adda Nickel Plating Services
Person to Contact:	Delores Norsic
Address:	7105 Krick Road Walton Hills, OH 44146-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
7105 Krick Road
Walton Hills, **Ohio**

Description of proposed emissions unit(s):
2 open top vapor degreasers and 4 ventilation systems.

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 are inadequate 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 prove to be inadequate 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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
Trichloroethylene (TCE)	9.90

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
L001 - Open top vapor degreaser using trichloroethylene with cover, superheated vapor, and 1.0 freeboard ratio	OAC rule 3745-31-05(A)(3)	2.8 lbs/hr of trichloroethylene and 4.45 tpy of trichloroethylene
	40 CFR 63, Subpart T (Alternative Standards 40 CFR 63.464)	See A.2.a. below
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V	See Terms A.2.b, A.2.c and B.

2. Additional Terms and Conditions

2.a The permittee shall ensure that the trichloroethylene monthly emissions from the solvent cleaning machine do not exceed the 3-month rolling average limit of 150 kilograms/square meter/month.

2.b Trichloroethylene emissions are restricted to 4.45 tons per year. Compliance with the above limitations shall be based on a rolling 12-month summation.

2.c The maximum annual operating hours for this emissions unit shall not exceed 3178.

B. Operational Restrictions

The maximum annual operating hours for this emissions unit shall not exceed 3178, based upon a rolling,

12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	795
1-2	1011
1-3	1227
1-4	1443
1-5	1659
1-6	1875
1-7	2091
1-8	2307
1-9	2523
1-10	2739
1-11	2955
1-12	3178

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.

2 The permittee shall demonstrate compliance with the 3-month rolling average monthly emissions of less than or equal to 150 kilograms/square meters/month on a monthly basis as follows.

   i. The permittee shall, on the first operating day of every month, ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month,

immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

ii. The permittee shall on the first operating day of the month comply with the following:

(a) Using the records of solvent additions and removals for the previous monthly reporting period, determine trichloroethylene emissions using the appropriate equation specified in the "Testing Requirements" section of this permit.

(b) Determining the total amount of trichloroethylene removed from the solvent cleaning machine in solid waste during the most recent monthly reporting period (kilograms of solvent per month) as specified in the "Testing Requirements" section of this permit.

(c) Determining the monthly rolling average for the 3-month period ending with the most recent reporting period using the appropriate equation specified in the "Testing Requirements" section of this permit.

3. The permittee shall maintain the following records either in electronic or written form for a period of five years:

a. The dates and amounts of trichloroethylene that are added to the solvent cleaning machine:

b. The trichloroethylene compositions of wastes removed from the cleaning machines using the procedures described in the "Testing Requirements" section of this permit.

c. Calculation sheets showing how the monthly emissions and the rolling 3-month average emissions of trichloroethylene from the solvent cleaning machine were determined, and the results of all calculation.

4. The permittee shall maintain monthly records of the following information:

a. The operating hours for each month.

b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

Also, during the first 12 calendar months of operation following the issuance of this permit, the

permittee shall record the cumulative operating hours for each calendar month.

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 of the solvent cleaning machine.

b. The address (i.e., physical location) of the solvent cleaning machine.

c. The solvent/air interface for the solvent cleaning machine.

d. The results of the first 3-month average of trichloroethylene emission calculations.

3. The permittee shall submit an annual solvent emission report by February 1 of each year. The report shall cover the previous calendar year. The report shall contain the following:

a. The size (solvent-air interface) and type of the solvent cleaning machine.

b. The average monthly trichloroethylene consumption for the solvent cleaning machine in kilograms per month.

c. The 3-month monthly rolling average trichloroethylene emissions estimates calculated each month using the method as described in the "Testing Requirements" section of this permit.

4. The permittee shall submit an exceedance report on a semiannual basis. If the trichloroethylene three-month rolling average of 150 kilograms/square meter/month is exceeded, 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 Cleveland Bureau of Air Pollution Control. 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 Cleveland Bureau of Air Pollution Control 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 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 deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. The permittee shall on the first operating day of every month:

a. Ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soil. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified in paragraph (1) (b) below. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

b. Comply with the following requirements:

i. Using the records of all solvent additions and removals for the three previous monthly reporting periods required in the "Monitoring and/or Record keeping Requirements" section of this permit, determine solvent emissions (Ei) using equation (1) below for cleaning machines with a solvent/air interface and equation (2) below for cleaning machines without a solvent/air interface:

Ei = (SAi-LSRi-SSRi)/AREAi ...(1)

En = SAi-LSRi-SSRi .....(2)

Where:

Ei = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per square meter of solvent/air interface are per month).

En = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

SAi = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

LSRi = the total amount of halogenated HAP liquid solvent removed the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

SSRi = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described below in paragraph (b) of this section, during the most recent monthly reporting period i (kilograms of solvent per month).

AREAi = the solvent /air interface area of the solvent cleaning machine (square meters).

ii. Determine SSRi from tests conducted using reference method 25d or from engineering calculations included in the compliance report.

iii. Determine the monthly rolling average EA for the 3-month period ending with the most recent reporting period using equation (3) for cleaning machines with a solvent/air interface or equation (4) for cleaning machines without a solvent/air interface.

EAi=(☐Ei)/3, where the summation is from j=1 to j= 3 .... (3)
EAn=(☐En)/3, where the summation is from j=1 to j=3 .... (4)

Where:

EAi = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

EAn = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per month).

Ei = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

En = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per month).

j=1 = the most recent monthly reporting period.
j=2 = the monthly reporting period immediately prior to j=1.
j=3 = the monthly reporting period immediately prior to j=2.

2. Compliance with the trichloroethylene limits in A.1 shall be demonstrate through recordkeeping and the following calculation:

E(lbs/month) = (SA (gallons) - SR (gallons)) x solvent density (lbs/gal)
Eh(lbs/hr) = E (lbs/month) / H (hrs/month)
Et(tpy) = Eh / 2000 lbs/ton x Ht (hrs year)

Where:
SA = solvent added
SR = solvent removed
H, Ht = hours of operation
E, Eh, Et = emissions

F. Miscellaneous Requirements

The following terms and conditions in this permit to install are federally enforceable: A.2.a, A.2.b, A.2.c, B, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, and D.5.

Emissions Unit ID: **L002**

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
L002 - Open top vapor degreaser using trichloroethylene with cover, superheated vapor, and 1.0 freeboard ratio	OAC rule 3745-31-05(A)(3)	2.8 lbs/hr of trichloroethylene and 4.45 tpy of trichloroethylene
	40 CFR 63, Subpart T (Alternative Standards 40 CFR 63.464)	See A.2.a. below
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V	See Terms A.2.b, A.2.c and B.

2. Additional Terms and Conditions

2.a The permittee shall ensure that the trichloroethylene monthly emissions from the solvent cleaning machine do not exceed the 3-month rolling average limit of 150 kilograms/square meter/month.

2.b Trichloroethylene emissions are restricted to 4.45 tons per year. Compliance with the above limitations shall be based on a rolling 12-month summation.

2.c The maximum annual operating hours for this emissions unit shall not exceed 3178.

B. Operational Restrictions

The maximum annual operating hours for this emissions unit shall not exceed 3178, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	795
1-2	1011
1-3	1227
1-4	1443
1-5	1659
1-6	1875
1-7	2091
1-8	2307
1-9	2523
1-10	2739
1-11	2955
1-12	3178

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.

2. The permittee shall demonstrate compliance with the 3-month rolling average monthly emissions of less than or equal to 150 kilograms/square meters/month on a monthly basis as follows.

a. The permittee shall, on the first operating day of every month, ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

b. The permittee shall on the first operating day of the month comply with the following:

i. Using the records of solvent additions and removals for the previous monthly reporting period, determine trichloroethylene emissions using the appropriate equation specified in the "Testing Requirements" section of this permit.

ii. Determining the total amount of trichloroethylene removed from the solvent cleaning machine in solid waste during the most recent monthly reporting period (kilograms of solvent per month) as specified in the "Testing Requirements" section of this permit.

iii. Determining the monthly rolling average for the 3-month period ending with the most recent reporting period using the appropriate equation specified in the "Testing Requirements" section of this permit.

3. The permittee shall maintain the following records either in electronic or written form for a period of five years:

a. The dates and amounts of trichloroethylene that are added to the solvent cleaning machine:

b. The trichloroethylene compositions of wastes removed from the cleaning machines using the procedures described in the "Testing Requirements" section of this permit.

c. Calculation sheets showing how the monthly emissions and the rolling 3-month average emissions of trichloroethylene from the solvent cleaning machine were determined, and the results of all calculation.

4. The permittee shall maintain monthly records of the following information:

a. The operating hours for each month.

b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

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:

2. 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.

3. The report shall include the anticipated compliance approach for the solvent cleaning machine.

4 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.

5. 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 of the solvent cleaning machine.

   b. The address (i.e., physical location) of the solvent cleaning machine.

   c. The solvent/air interface for the solvent cleaning machine.

   d. The results of the first 3-month average of trichloroethylene emission calculations.

6. The permittee shall submit an annual solvent emission report by February 1 of each year. The report shall cover the previous calendar year. The report shall contain the following:

   a. The size (solvent-air interface) and type of the solvent cleaning machine.

   b. The average monthly trichloroethylene consumption for the solvent cleaning machine in kilograms per month.

   c. The 3-month monthly rolling average trichloroethylene emissions estimates calculated each month using the method as described in the "Testing Requirements" section of this permit.

7. The permittee shall submit an exceedance report on a semiannual basis. If the trichloroethylene three-month rolling average of 150 kilograms/square meter/month is exceeded, 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 Cleveland Bureau of Air Pollution Control. 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 Cleveland Bureau of Air Pollution Control 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 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.

E. Testing Requirements

1. The permittee shall on the first operating day of every month:

   a. Ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soil. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified in paragraph (1) (b) below. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

   b. Comply with the following requirements:

      i. Using the records of all solvent additions and removals for the three previous monthly reporting periods required in the "Monitoring and/or Record keeping Requirements" section of this permit, determine solvent emissions (Ei) using equation (1) below for cleaning machines with a solvent/air interface and equation (2) below for cleaning machines without a solvent/air interface:

         Ei = (SAi-LSRi-SSRi)/AREAi ...(1)

         En = SAi-LSRi-SSRi .....(2)

         Where:

         Ei = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per square meter of solvent/air interface are per month).

         En = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

         SAi = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

         LSRi = the total amount of halogenated HAP liquid solvent removed the

solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

SSRi = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described below in paragraph (b) of this section, during the most recent monthly reporting period i (kilograms of solvent per month).

AREAi = the solvent /air interface area of the solvent cleaning machine (square meters).

ii. Determine SSRi from tests conducted using reference method 25d or from engineering calculations included in the compliance report.

iii. Determine the monthly rolling average EA for the 3-month period ending with the most recent reporting period using equation (3) for cleaning machines with a solvent/air interface or equation (4) for cleaning machines without a solvent/air interface.

EAi=(☐Ei)/3, where the summation is from j=1 to j= 3 .... (3)
EAn=(☐En)/3, where the summation is from j=1 to j=3 .... (4)

Where:

EAi = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

EAn = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per month).

Ei = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

En = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per month).

j=1 = the most recent monthly reporting period.

j=2 = the monthly reporting period immediately prior to j=1.
j=3 = the monthly reporting period immediately prior to j=2.

F. Miscellaneous Requirements

The following terms and conditions in this permit to install are federally enforceable: A.2.a, A.2.b, A.2.c, B, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, and D.5.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03652 Facility ID: 1318588243

FACILITY NAME Adda Nickel Plating Services

FACILIT

Emissions Unit ID: **L002**

SIC CODE 3471 SCC CODE 3-99-999-99 EMISSIONS UNIT ID L001

EMISSIONS UNIT DESCRIPTION Open top vapor degreaser using trichloroethylene with cover, superheated vapor, and 1.0 freeboard ratio

DATE INSTALLED 1/1/2000

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					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Unclassified	1.65 lbs/hr	1.65 tpy	2.8 lbs/hr	4.45 tpy

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? 40 CFR 63 Subpart T PSD? OFFSET POLICY?

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

Enter Determination The BAT determination is compliance with the terms and conditions of this permit and the federal MACT Standards. The basis for the determination is knowledge of the source.

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:

11881.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 13-03652 Facility ID: 1318588243

FACILITY NAME Adda Nickel Plating Services

FACILITY DESCRIPTION 2 open top vapor degreasers CITY/TWP Walton Hills

Emissions Unit ID: **L002**

SIC CODE 3471 SCC CODE 3-99-999-99 EMISSIONS UNIT ID L002

EMISSIONS UNIT DESCRIPTION Open top vapor degreaser using trichloroethylene with cover, superheated vapor, and 1.0 freeboard ratio

DATE INSTALLED 1/1/2000

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					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Unclassified	1.65 lbs/hr	1.65 tpy	2.8 lbs/hr	4.45 tpy

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? 40 CFR 63 Subpart T PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination The BAT determination is compliance with the terms and conditions of this permit and the federal MACT Standards. The basis for the determination is knowledge of the source.

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:

NEW SOURCE REVIEW FORM B

PTI Number: 13-03652 Facility ID: 1318588243

FACILITY NAME Adda Nickel Plating Services

FACILITY DESCRIPTION 2 open top vapor degreasers CITY/TWP Walton Hills

Emissions Unit ID: **L002**

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

NONE

Please provide any additional permit specific notes as you deem necessary:

Premise No.: 13-18-58-8243Source No.: L001, L002PTI Number 13-03652

City of Cleveland Bureau of Air Pollution Control
EES - Emissions Calculation Form

1. **Facility Name: Add-a-Nickel Plating Services**
2. **Source Description: 2 open top vapor degreasers**
3. **Source Inspected: [] Yes [X] No Source Operating: [X] Yes [] No**
4. **Calculations:**

Degreasers:
Trichlorothylene usage: 463 gpy (232 gpy per unit)
operating hours: 2000 hrs/yr (also see restriction below)
density = 1.63 g/cc = 13.61 lbs/gal
MACT Sources ∴ no modeling is needed for Trichloroethylene, compliance with the MACT Standard will demonstrate compliance with trichloroethylene
S/A Interface = 1.4 m^2

L001 (Vapor Degreaser #1)
Federally Enforceable Rules/Limits
Must be in compliance with OAC rule 3745-21-09(O)
Must be in compliance with 40 CFR 63, Subpart T
☞150 kg/m^2/month (from 40 CFR 63.464, Table 5 of Alternate Standards)

Potential to Emit
150 kg/m^2/month x 1.4 m^2 = 210 kg/month
210 kg/month x 2.205 lbs/kg = 463.1 lbs/month
463.1 lbs/month / 167 hrs/month = 2.8 lbs/hr
2.8 lbs/hr x 8760 hrs/yr / 2000 lbs/ton = 12.13 tpy

Determine operating hours for restriction
Want to restrict TCE to 9.9 tpy (4.45 tpy each degreaser)
4.45 tpy x 2000 lbs/ton = 8900 lbs/yr
8900 lbs/yr / 2.8 lbs/hr = 3178 hrs/yr per unit

PTI Allowable

2.8 lbs/hr x 3178 hrs/yr / 2000 lbs/ton = 4.45 tpy

Uncontrolled Actual
232 gpy x 13.61 lbs/gal / 2000 hrs/yr = 1.65 lbs/hr
1.65 lbs/hr x 2000 hrs/yr / 2000 lbs/ton = 1.65 tpy

L002 (Vapor Degreaser #1)
Federally Enforceable Rules/Limits
Must be in compliance with OAC rule 3745-21-09(O)
Must be in compliance with 40 CFR 63, Subpart T
☞150 kg/m^2/month (from 40 CFR 63.464, Table 5 of Alternate Standards)

Potential to Emit
150 kg/m^2/month x 1.4 m^2 = 210 kg/month
210 kg/month x 2.205 lbs/kg = 463.1 lbs/month
463.1 lbs/month / 167 hrs/month = 2.8 lbs/hr
2.8 lbs/hr x 8760 hrs/yr / 2000 lbs/ton = 12.13 tpy

Determine operating hours for restriction
Want to restrict TCE to 9.9 tpy (4.45 tpy each degreaser)
4.45 tpy x 2000 lbs/ton = 8900 lbs/yr
8900 lbs/yr / 2.8 lbs/hr = 3178 hrs/yr per unit

PTI Allowable
2.8 lbs/hr x 3178 hrs/yr / 2000 lbs/ton = 4.45 tpy

Uncontrolled Actual
232 gpy x 13.61 lbs/gal / 2000 hrs/yr = 1.65 lbs/hr
1.65 lbs/hr x 2000 hrs/yr / 2000 lbs/ton = 1.65 tpy

5. Emissions (tons/year) **Note: *Based on actual operating hours **Based on 24 hrs/day, 365 days/yr**

Emissions Unit	Actual*	Potential to Emit**	PTI Allowable**
L001	1.65	12.13	4.45
L002	1.65	12.13	4.45
TOTAL	3.30 TCE	24.26 TCE	9.90 TCE

Source Class: Major [] Minor [] Other [X]

29 **NEW SC**
PTI Num
FACILIT
Emissions Unit ID: **L002**
FACILITY DESCRIPTION 2 open top vapor degreasers CITY/TWP Walton Hills
Recommendation: T-status [] Approve [X] Deny [] Revoke []

Examiner:____Jane M. Bell_____ Date:____2/28/2000_____

Permit To Install Synthetic Minor Write-Up

A. Source Description

L001 and L002 are open top vapor degreasers. The degreasers use trichloroethylene as a solvent. The company has requested a Federally Enforceable Permit to Install (Synthetic Minor) for this facility.

B. Facility Emissions

The source is located in Cleveland, in Cuyahoga County. Cuyahoga county is in attainment for ozone.

C. Source Emissions

Add-a-Nickel Plating Service is a potential Title V source for hazardous air pollutants (HAPs). Based on operating 8760 hours per year, each line has the potential to emit (PTE) exceeding Title V thresholds. Add-a-Nickel Plating Service volunteers to restrict the emissions of individual HAPs to 9.90 tons per year through an operating hours restriction.

Pollutant	PTE without restriction (tpy)	Synthetic Minor limitations (tpy)	PTE with restriction (tpy)
Trichloroethylene (TCE)	12.13 per unit 24.26 total	4.45 per unit 9.90 total	4.45 per unit 9.90 total

D. Conclusion

Restricting the operating hours per unit to 3178 hours per year (rolling 12-month summation) will decrease the amount of HAP emissions to below 10 tpy. Therefore, Add-a-Nickel Plating will not be subject to Title V permitting.

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
Trichloroethylene (TCE)	9.90

NEW SOURCE REVIEW FORM B

PTI Number: 13-03652 Facility ID: 1318588243

FACILITY NAME Adda Nickel Plating Services

FACILITY DESCRIPTION 2 open top vapor degreasers CITY/TWP Walton Hills

Emissions Unit ID: **L002**

3 **NEW SC**

PTI Num

FACILIT

Emissions Unit ID: **L002**

FACILITY DESCRIPTION 2 open top vapor degreasers CITY/TWP Walton Hills