



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CLERMONT COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05666

Fac ID: 1413020412

DATE: 3/22/2005

American Micro Products
John Woods
4288 Armstrong Boulevard
Batavia, OH 45103

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, 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.

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 3/22/2005
Effective Date: 3/22/2005**

FINAL PERMIT TO INSTALL 14-05666

Application Number: 14-05666
Facility ID: 1413020412
Permit Fee: **\$200**
Name of Facility: American Micro Products
Person to Contact: John Woods
Address: 4288 Armstrong Boulevard
Batavia, OH 45103

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4288 Armstrong Boulevard
Batavia, Ohio**

Description of proposed emissions unit(s):
Enclosed 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

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

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

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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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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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	3.2

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>
L002 - Batch vapor solvent cleaning machine	OAC rule 3745-31-05(A)(3)	Volatile organic compound emissions shall not exceed 122 pounds of VOC per week and 3.2 TPY of VOC. See term B.14
	40 CFR Part 63 Subpart T	The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart T. See terms A.2.a - A.2.h and B.1 - B.13
	OAC rule 3745-21-09(O)(3)	Exempt

2. Additional Terms and Conditions

- 2.a The solvent cleaning machine shall have a cover that completely, covers the machine openings. The cover must be closed at all times except: when parts are being cleaned, when the solvent has been removed from the machinery or when maintenance or monitoring is being performed that requires the cover to not be in place. The cover must be periodically inspected to ensure that it remain free of cracks, holes and other defects.
- 2.b 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 the cleaned parts.

- 2.c** 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.
- 2.d** The solvent cleaning machine shall be equipped with a vapor level control device that shuts off the sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.e** The solvent cleaning machine shall have a primary condenser.
- 2.f** To comply with the control requirements in 40 CFR 63.463(b)(i) the degreaser shall be equipped with the following:
- (i) A freeboard ratio of 1.0 or higher, where the freeboard ratio is the height of the freeboard divided by the smallest interior freeboard width.
 - (ii) Reduced room draft where the flow or movement of air is decreased across the top of the freeboard area (See term A.2.g).
 - (iii) A superheated vapor system (See term A.2.h).
- 2.g** To comply with the control requirements in 40 CFR 63.463(e)(2)(ii), a reduced room draft, the degreaser shall comply with the following:
- (i) Ensure 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.
 - (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.h** To comply with the control requirements in 40 CFR 63.463(e)(2)(vi), a superheated vapor system, the degreaser shall comply with the following:
- (i) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 °F above the solvent's boiling point.
 - (ii) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.

- (iii) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.

B. Operational Restrictions

1. The parts baskets or the parts being cleaned in the 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 meters per minute (3 feet per minute) or less.
2. 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.
3. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Hamilton County Department of Environmental Services.
4. Parts or parts baskets shall not be removed from any solvent cleaning machine until dripping has stopped.
5. During startup of the solvent cleaning machine, the primary condenser shall be turned on before the sump heater.
6. 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.
7. When solvent is added or drained from any 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.
8. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Hamilton County Department of Environmental Services satisfaction to achieve the same or better results as those recommended by the manufacturer.
9. Each operator of the solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures (in appendix B) if requested during an inspection by the Hamilton County Department of Environmental Services.
10. Waste solvent, still and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow

liquid solvent to drain from the container.

11. Sponges, fabric, wood, and paper products shall not be cleaned.
12. The permittee shall repair any solvent leaks immediately or shutdown the degreaser.
13. The permittee shall provide a permanent conspicuous label, summarizing the operating procedures.
14. The amount of solvent evaporated shall not exceed 520 gallons per year.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the following monitoring requirements:
 - a. Conduct monitoring of each control device used to comply with 40 CFR Part 63.463 of Subpart T;
 - b. For the idling-mode cover, the permittee shall ensure the following:
 - (i) That the cover is in place whenever parts are not in the solvent cleaning machine and it completely covers the cleaner openings when in place.
 - (ii) The cover is maintained free of cracks, holes, and other defects.
2. An exceedance has occurred if the permittee fails to comply with term C.1.b.i.
3. An exceedance has occurred if requirements of Term C.1.b.i and C.1.b.ii have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to re-establish required levels. The parameter must be re-measured immediately upon adjustment or repair and demonstrated to be within required limits. All exceedances and all corrections and adjustments shall be reported.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the superheated vapor system by using a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.
5. On a monthly basis, the permittee shall conduct a visual inspection of the cover to determine if it 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 monitor the hoist speed as follows:
 - a. The hoist speed shall be determined by measuring the time it takes the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes.
 - 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 the quarterly monitoring, the frequency shall return to monthly until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Hamilton County Department of Environmental Services in the initial compliance report that the hoist speed cannot exceed 3.4 meters per minute (11 feet per minute), the required frequency shall be quarterly including during the first year of compliance.
7. The permittee shall determine their potential to emit from all solvent cleaning operations using the procedures described in 40 CFR Part 63.465(e)(1) through (e)(3). The permittee's total potential to emit shall be the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other sources within the facility.
8. The permittee shall maintain records, in written or electronic form, of the following 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 is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, on, or after 11/29/93.
 - c. Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of Subpart T.
10. 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 the provisions of 40 CFR Part 63.463(e) and (f), including records of 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 accepted levels.
 - c. The amount of solvent evaporated on a weekly basis and the annual amount of solvent evaporated.
11. The permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of

the wind speed within the enclosure using the procedures outlined in (a) and (b) below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.

- a. Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.
- b. Record the maximum wind speed.

D. Reporting Requirements

1. 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 terms and conditions of this permit.
2. The permittee shall submit an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the following requirements:
 - a. A signed statement from the permittee or his 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 in 40 CFR Part 63.463(d)(10)."
 - b. An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
3. The permittee shall submit an exceedance report on a semiannual basis. This report shall be submitted no later than January 30th and July 30th of each year and shall cover the previous 6

Emissions Unit ID: **L002**

calendar months (January-June and July-December). 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 of air 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 or if the manufacturer's specification for determining the minimum dwell time within the superheated vapor system was not followed and/or parts did not remain within the vapor zone for at least the minimum proper dwell time and/or if the temperature of the solvent vapor at the center of the superheated vapor zone was less than 10 degrees Fahrenheit above the solvent's boiling point, and correction was not 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.

E. Testing Requirements

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:
 122 lb VOC/week
 3.2 TPY VOC

Applicable Compliance Method:
 Compliance with the annual VOC emission limitation in these terms and conditions shall be demonstrated by the following equation:

$$520 \text{ gallons/year of solvent} \times 12.2 \text{ lbs/gallon} \times \text{ton}/2000\text{lbs} = 3.2 \text{ TPY}$$

The hourly limit is calculated by dividing the annual VOC emissions limit by 52 weeks.

2. Compliance with the solvent usage limit in term and condition B.14 shall be demonstrated by the recordkeeping in term and condition C.9.
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:

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

Where:

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

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

- c. Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.
4. The permittee shall conduct an initial test, and monthly monitoring tests thereafter of the wind speed within the full or partial enclosure as follows:
 - a. Determine the direction of the wind current in the enclosure by slowly rotating a velometer or similar device inside the entrance to the enclosure until the maximum speed is located.
 - b. Record the maximum wind speed.

F. Miscellaneous Requirements

None