State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
LORAIN COUNTY

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

Application No: 02-16443

DATE: 6/20/2002

Helical Line Products Co.
William Bonds
PO Box 217
Avon Lake, OH 44012

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$2400** 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
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **NEDO**

DRAFT PERMIT TO INSTALL 02-16443

Application Number:	02-16443
APS Premise Number:	0247030987
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Helical Line Products Co.
Person to Contact:	William Bonds
Address:	PO Box 217 Avon Lake, OH 44012

Location of proposed air contaminant source(s) [emissions unit(s)]:
659 Miller Rd
Avon Lake, Ohio

Description of proposed emissions unit(s):
Vapor degreaser, two coating lines, two bake ovens.

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

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit

shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

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.

11. 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.

12. 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.

B. State Only Enforceable 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 of state-only enforceable 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 state-only required 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. 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.

4. 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.

5. 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.

6. 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.

7. 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).

8. 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
VOC	17.26

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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
K002 - Rod bonding oven No. 2, sets of metal rods are coated with adhesive and run through an electric radiant oven.	OAC rule 3745-31-05(A)(3)	3 gallons per day of total coating usage 19.44 pounds per day and 3.55 tons per year of VOC emissions
	OAC rule 3745-21-09(U)(2)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See section A.2a.

2. Additional Terms and Conditions

2.a This emissions unit shall be exempt from the compliant coating requirements in OAC rule 3745-21-09(U)(1), by restricting material usage to 3 gallons per day.

II. Operational Restrictions

1. This emissions unit shall not employ more than three gallons of coatings per day.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information daily for the emissions unit (K002):

   a. the name and identification number of each coating employed;

b. the VOC content of each coating, as employed;

c. the number of gallons of each coating employed; and

d. the total VOC emission rate for all coatings, calculated as the sum of (b) x (c) for each coating, in pounds per day.

The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify each day during which the total coating usage exceeded 3 gallon per day and the actual coating usage for each such day.

2. The permittee shall submit deviation (excursion) reports which identify each day during which the total VOC emissions exceeded 19.44 pounds per day and the actual VOC emissions for each such day.

V. Testing Requirements

1. Emission Limitation:
   3 gallons per day of total coating usage
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

2. Emission Limitation:
   19.44 pounds per day of VOC emissions

   Applicable Compliance Method:
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

3. Emission Limitation:
   3.55 tons per year of VOC emissions

   Applicable Compliance Method:
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III. Annual emissions shall be calculated by adding the daily (or monthly if maintained) records of VOC emissions at the end of each year.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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
K002 - Rod bonding oven No. 2, sets of metal rods are coated with adhesive and run through an electric radiant oven.	none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit K002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 8.21

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,034

MAGLC (ug/m3): 4,480

Pollutant: Methyl Ethyl Ketone (MEK)

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 0.38

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 48

MAGLC (ug/m3): 14,000

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required.

If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: K003

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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
K003 - Gritting Machine No. 1, rods are passed through a spray of adhesive and then are coated with aluminum oxide.	OAC rule 3745-31-05(A)(3)	3 gallons per day of total coating usage, including cleanup materials 17.37 pounds per day and 3.17 tons per year of VOC emissions.
	OAC rule 3745-21-09(U)(2)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See section A.2a.

2. Additional Terms and Conditions

2.a This emissions unit shall be exempt from the compliant coating requirements in OAC rule 3745-21-09(U)(1), by restricting material usage to 3 gallons per day.

II. Operational Restrictions

1. This emissions unit shall not employ more than three gallons per day of coatings, including cleanup materials.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information daily for the emissions unit (K003):

   a. the name and identification number of each coating and cleanup material employed;

   b. the VOC content of each coating and cleanup material, as employed;

c. the number of gallons of each coating and cleanup material employed; and

d. the total VOC emission rate for all coatings and cleanup materials, calculated as the sum of (b) x (c) for each coating and cleanup material, in pounds per day.

The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify each day during which total coating and cleanup material usage exceeded 3 gallons per day and the actual coating and cleanup materials usage for each such day.

2. The permittee shall submit deviation (excursion) reports which identify each day during which the total VOC emissions exceeded 17.37 pounds per day and the actual VOC emissions for each such day.

V. Testing Requirements

1. Emission Limitation:
   3 gallons per day of total coating usage, including cleanup materials

   Applicable Compliance Method:
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

2. Emission Limitation:
   17.37 pounds per day of VOC emissions

   Applicable Compliance Method:
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

3. Emission Limitation:
   3.17 tons per year of VOC emissions

   Applicable Compliance Method:
   Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III. Annual emissions shall be calculated by adding the daily (or monthly if maintained) records of VOC emissions at the end of each year.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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
K003 - Gritting Machine No. 1, rods are passed through a spray of adhesive and then are coated with aluminum oxide.	none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit K003 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 73

MAGLC (ug/m3): 4,480

Pollutant: Methyl Ethyl Ketone (MEK)

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 227

MAGLC (ug/m3): 14,000

Pollutant: Methyl Isobutyl Ketone (MIBK)

TLV (mg/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 0.97

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 165

MAGLC (ug/m3): 4,877

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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
K004 - Gritting machine No. 2, rods are passed through a spray of adhesive and then coated with aluminum oxide.	OAC rule 3745-31-05(A)(3)	3 gallons per day of total coating usage, including cleanup materials 17.37 pounds per day and 3.17 tons per year of VOC emissions
	OAC rule 3745-21-09(U)(2)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See section A.2a.

2. Additional Terms and Conditions

2.a This emissions unit shall be exempt from the compliant coating requirements in OAC rule 3745-21-09(U)(1), by restricting material usage to 3 gallons per day.

II. Operational Restrictions

1. This emissions unit shall not employ more than three gallons of coatings per day, including cleanup materials.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information daily for the emissions unit (K004):

   a. the name and identification number of each coating and cleanup material employed;

   b. the VOC content of each coating and cleanup material, as employed;

c. the number of gallons of each coating and cleanup material employed; and

d. the total VOC emission rate for all coatings and cleanup materials, calculated as the sum of (b) x (c) for each coating and cleanup material, in pounds per day.

The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify each day during which the total coating and cleanup material usage exceeded 3 gallons per day and the actual coating usage for each such day.

2. The permittee shall submit deviation (excursion) reports which identify each day during which the total VOC emissions exceeded 17.37 pounds per day and the actual VOC emissions for each such day.

V. Testing Requirements

1. Emission Limitation:
3 gallons per day of total coating usage, including cleanup materials

Applicable Compliance Method:
Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

2. Emission Limitation:
17.37 pounds per day of VOC emissions

Applicable Compliance Method:
Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III.

3. Emission Limitation:
3.17 tons per year of VOC emissions

Applicable Compliance Method:
Compliance shall be based upon the Monitoring and/or Record Keeping requirements specified in Section A.III. Annual emissions shall be calculated by adding the daily (or monthly if maintained) records of VOC emissions at the end of each year.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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
K004 - Gritting machine No. 2, rods are passed through a spray of adhesive and then coated with aluminum oxide.	none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit K004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 66

MAGLC (ug/m3): 4,480

Pollutant: Methyl Ethyl Ketone (MEK)

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 206

MAGLC (ug/m3): 14,000

Pollutant: Methyl Isobutyl Ketone (MIBK)

TLV (mg/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 0.97

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 150

MAGLC (ug/m3): 4,877

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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	OAC rule 3745-31-05(A)(3)	7.38 tons VOC (trichloroethylene {TCE}) per year The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subpart T.
	40 CFR 63, Subpart T	150 kg TCE/m^2/month, as a 3-month rolling average, see A.I.2.a.
	OAC rule 3745-21-09 (O)(3)	In accordance with paragraph (O)(6)(b) of OAC rule 3745-21-09, the requirements of OAC rule 3745-21-09 (O)(3) shall not apply to this emissions unit.

2. Additional Terms and Conditions

2.a The permittee shall demonstrate compliance with 40 CFR 63 Subpart T, by using the alternative standard emission limit requirement found in 63.464 (a)(1). The permittee shall ensure that the monthly trichloroethylene emissions from the solvent cleaning machine do not exceed 150 kilograms/square meter/month, as a 3-month rolling average; this is equivalent to 1,230 lbs TCE/month, based on a 3-month rolling average.

II. Operational Restrictions

None

III. 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 meter/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, or as close to that fill line as possible by adding solvent in full 55 gallon drum increments, 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 equation specified in Section V.1;

      ii. determine 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 Section V.1.a of this permit; and

      iii. determine the monthly rolling average emissions for the 3-month period ending with the most recent reporting period using the equation specified in Section V.1.b.

   This compliance method may be abandoned and an alternative compliance method from 40 CFR 63.463 can be used if approved by the Ohio EPA Northeast District office, or if U.S. EPA provides written approval of an alternate standard.

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 composition of wastes removed from the cleaning machine, using U.S. EPA reference test Method 25d or engineering calculations; and

   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 calculations.

4. The permittee shall maintain an annual record of the number of gallons of TCE used and the density (pounds per gallon). The permittee shall also record the amount of waste solvent sent off site to a waste treatment facility (TSDF).

5. As required in 40 CFR 63.465(e) the permitee shall determine the potential to emit. The potential to emit (PTE) for this emissions unit shall be documented as follows:

   PTE = H x W x SAI

   where:

   PTE = potential to emit (kg of TCE/yr)

   H= hour of operation (8760 hrs/yr)

   W = the working mode uncontrolled emission rate (1.95 kg/m^2/hr)

   SAI = solvent/air interface area of solvent cleaning machine (3.72 m^2)

   therefore:

   PTE = 8760 hrs/yr x 1.95 kg/m^2/hr x 3.72 m^2 = 63,545 kg/yr

   PTE = 63,545 kg/yr x 2.2046 lbs/kg x 1 ton/2000 lbs = 70.0 tons/yr

IV. Reporting Requirements

1. The permittee shall submit an annual solvent emissions report by February 1 of each year. The report shall cover the previous calendar year and shall be submitted to the Northeast District Office of the Ohio Environmental Protection Agency. The report shall contain the following.

   a. the size (solvent/air interface area) and type of the solvent cleaning machine;

   b. the trichloroethylene consumption for the solvent cleaning machine, in kilograms for each calendar month;

   c. the average monthly trichloroethylene consumption, for the year, in kilograms per month;

   d. the 3-month rolling average trichloroethylene emissions estimates calculated for each calendar month, in kilograms of TCE per meter squared per month, calculated using the method described in Section V.1 of this permit; and

e. the total TCE emissions for the calendar year.

2. The permittee shall submit an exceedance report on a semiannual basis. If the trichloroethylene 3-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 Director (Ohio EPA Northeast District Office). 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 record keeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Director (Northeast District Office) 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; and

b. if no exceedance has occurred, a statement to that effect shall be submitted.

V. Testing Requirements

Compliance with the emission limits in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1. Emission Limitation:

150 kg TCE/m^2/month, as a 3-month rolling average

Applicable Compliance Method:

a. Using the records of all solvent additions and removals for each month, as required in the "Monitoring and/or Record Keeping Requirements" section of this permit, the solvent emission (Ei) shall be calculated using the equation below:

$$Ei = (SAi - LSRi - SSRi) / AREAi$$

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 area/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 TCE per month).

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

SSRi = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, during the most recent monthly reporting period "i" (kilograms of TCE per month), determined from tests conducted using U. S. EPA reference test Method 25d or from engineering calculations, which shall be included in the compliance report.

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

b. The monthly rolling average TCE emissions (EAj), shall be calculated for each 3-month period, ending with the most recent reporting period, using the equation below:

EAj = the sum, from j = 1 to j = 3, of (Ei)j, divided by 3,

where:

EAj = 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).

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).

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.

c. The permittee shall maintain the TCE content and records as required in Section III.2 and III.3.

2. Emission Limitation:

7.38 tons VOC (trichloroethylene) per year

Applicable Compliance Method:

To determine the annual volatile organic compound emission rate, the following equation shall be used:

E = (Ls - Lw) x D/2000

Where:

E = volatile organic compound emission rate in tons per year

Ls = liquid volume of cleaning solvent employed each year (gallons)

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

D = density of cleaning solvent (pounds/gallon).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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 for metal cleaning	none	none

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None