



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

02/29/00

CERTIFIED MAIL

**RE: Final Title V Chapter 3745-77
permit**

01-80-01-0110
Denison Hydraulics, Inc.
JOHN BREIDENBACH
14249 INDUSTRIAL PARKWAY
MARYSVILLE, OH 43040

Dear JOHN BREIDENBACH:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging 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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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

If you have any questions, please contact Central District Office.

Very truly yours,

A handwritten signature in black ink that reads "Thomas G. Rigo". The signature is written in a cursive style with a large, stylized initial 'T'.

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

cc: Central District Office
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 02/29/00

Effective Date: 02/29/00

Expiration Date: 02/29/05

The duration of this permit will be five years.

This document constitutes issuance to:

Denison Hydraulics, Inc.
3232 Alum Creek Drive
PO Box 1049
Columbus, OH 43216-1049

of a Title V permit for Facility ID: 01-80-01-0110

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:

L004 (Vapor Degreaser)
Large Pump Degreasing before Painting @R001 (was L001)

L005 (Vapor Degreaser)
Misc Small Parts Degreasing before Heat Treatment (was L002)

L006 (Vapor Degreaser)
Degreasing before PV pump painting

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight

on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Central District Office
(614) 728-3778

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

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 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 emission limitations, operational restrictions, and control device operating parameter limitations, 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. 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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 applicable, the permittee shall 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”); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management 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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. 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.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.
 - 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.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency and to the Administrator of U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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. 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).

4. 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.

5. 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.

6. 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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

Heating Boiler (B001), Plant Air Make-up Unit (B002), Horizontal Blowers (B003), Natural Gas Fired Heater (B004), Natural Gas Fired Heater (B005), Natural Gas Fired Kolene Heater (B006), Procedyne Heat Treatment (B007), Paint Line (K001), Heated Rinse Tanks (P001), Wheelabrator Tumbler (P002), Sandblasting (P003), Machine Finishing Tools (P005), Finishing Grinders (P006), Lapping Tables (P007), Aqueous Wash Tank (P008), Aqueous Wash Tank (P009), Vacuum Furnace (P011), Sursulf (P012), Tempering Oven (P013), Tempering Oven (P014), Paint Spray Booth (R001), Wastewater Storage Tank (T002), LPG Storage Tank (Z004)

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vapor Degreaser (L004)
Activity Description: Large Pump Degreasing before Painting @R001 (was L001)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and reduced room draft	40 CFR 63.463	See Additional Terms and Conditions 2.a thru 2.g and Sections II, III, IV and V.
	OAC rule 3745-21-09(O)(6)(b)	This emissions unit is exempt from the requirements of OAC rule 3745-21-09(O)(2) thru (O)(5). See Additional Term and Condition 2.h.
	OAC rule 3745-31-05 (PTI 01-6328)	5.76 lbs/hr of organic compounds (OC) no more than 520 hours of operation per month no more than 261 gallons of cleaning solvent employed per month

2. Additional Terms and Conditions

- 2.a** The permittee shall ensure that the chilled air blanket temperature (in degrees F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.
- 2.b** The permittee shall reduce room draft to ensure that the flow or movement across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time measured using the procedure described in the "Monitoring and/or Recordkeeping Requirements" section of this permit. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.
- 2.c** The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.
- 2.d** The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- 2.e** 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. Additional Terms and Conditions (continued)

- 2.f The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.g The solvent cleaning machine shall have a primary condenser.
- 2.h The rule citation reflects the new exemption added to OAC rule 3745-21-09(O) for solvent metal cleaning operations subject to federal MACT standards under 40 CFR, Subpart T, provided the requirements of that Subpart T are specified in the terms and conditions. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for VOC.

II. Operational Restrictions

- 1.
 - a. 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 meter per minute (3 feet per minute) or less.
 - b. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - c. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Ohio EPA, Central District Office.
 - d. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
 - e. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
 - f. 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.
 - g. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - h. The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Ohio EPA, Central District Office to achieve the same or better results as those recommended by the manufacturer.
 - i. The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR Part 63, Appendix A if requested during an inspection by the Ohio EPA, Central District Office.
 - j. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
 - k. Sponges, fabric, wood, and paper products shall not be cleaned.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the hoist speed as described below:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Ohio EPA, Central District Office in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
 - c. Records of the halogenated hazardous air pollutant (HAP) solvent content for the solvent used in the solvent cleaning machine.
3. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. The results of control device monitoring required in this section of the permit.
 - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.
5. The permittee shall conduct an initial monitoring test of the wind speed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:
 - a. Measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine as follows:
 - i. Determine the direction of the wind current in the enclosure by slowly rotating a velometer or similar device inside the entrance to the enclosure until the maximum speed is located.
 - ii. Record the maximum speed.
 - b. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.
6. The permittee shall maintain monthly records of the number of hours the solvent cleaning machine was in operation.

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall maintain monthly records of the number of gallons of solvent used in the solvent cleaning machine.

IV. Reporting Requirements

1. The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:
 - a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463(d)(10)."
 - b. An estimate of solvent consumption during the reporting period.
2. The permittee shall submit an exceedance report on a semiannual basis. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If the temperature of the chilled air blanket, measured at the center of the air blanket, was greater than 30% of the solvent's boiling point, and no correction was made within 15 days of detection, or if no operating 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 cover did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or if the cover had cracks, holes or other defects and no correction was made within 15 days of detection 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 Ohio EPA, Central 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 recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Ohio EPA, Central 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 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.
3. The permittee shall submit semiannual exceedance reports which identify each month during which the number of hours the solvent cleaning machine was in operation exceeded 520 hours, and the actual hours of operation for each such month. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no exceedance has occurred, a statement to that effect shall be submitted.
4. The permittee shall submit semiannual exceedance reports which identify each month during which the number of gallons of cleaning solvent employed in the solvent cleaning machine exceeded 261 gallons, and the actual gallons of solvent employed for each such month. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no exceedance has occurred, a statement to that effect shall be submitted.

V. Testing Requirements

1. 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:

V. Testing Requirements (continued)

- 1.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.

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

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

Where:

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

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

- 1.c** Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.
- 2.** Compliance with the 5.76 lbs OC/hr limit is demonstrated based on the maximum allowable OC emission rate of 17.97 tons OC/year specified in section B.I.1 of this permit and 520 hours of operation/month as follows:
 $(17.97 \text{ tons OC/year}) \times (1 \text{ year}/12 \text{ months}) \times (\text{month}/520 \text{ hours of operation}) \times (2000 \text{ lbs/ton}) = 5.76 \text{ lbs OC/hr}$
- 3.** Compliance with the operating hours limitation of 520 hours per month shall be based on the record keeping specified in section A.III.6 of this permit.
- 4.** Compliance with the solvent usage limitation of 261 gallons of solvent per month shall be based on the record keeping specified in section A.III.7 of this permit.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and reduced room draft	OAC rule 3745-31-05 (PTI 01-6328)	OC emissions shall not exceed 17.97 tons/year.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permittee shall maintain records of the total annual liquid volume of cleaning solvent employed each year (gallons) and the total annual liquid volume of cleaning solvent sent off site as waste (gallons).

IV. Reporting Requirements

- The permittee shall submit an annual report which summarizes the annual total OC emissions as calculated according to the "Testing Requirements" section of this permit. This report shall be submitted to the Ohio EPA, Central District Office by February 1 of each year and shall cover the operations of the solvent cleaning machine for the previous calendar year.

V. Testing Requirements

- Compliance with the emission limitation in section B.I.1 of this permit shall be determined in accordance with the following method:

Emission Limitation:
17.97 tons/year OC emissions

Applicable Compliance Method:
To determine the actual organic compound emission rate, the following equation shall be used:

$$E = (L_s - L_w) \times D / 2000$$

E= organic compound emissions rate (tons/year)

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

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

D= density of cleaning solvent (pounds/gallon)

If more than one type of cleaning solvent is employed, the above equation shall be used for each cleaning solvent. The total annual organic compound emission rate shall be determined by the summation of the annual organic compound emission rates for all cleaning solvents.

Facility Name: **Denison Hydraulics, Inc.**

Facility ID: **01-80-01-0110**

Emissions Unit: **Vapor Degreaser (L004)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vapor Degreaser (L005)

Activity Description: Misc Small Parts Degreasing before Heat Treatment (was L002)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and reduced room draft	40 CFR 63.463	See Additional Terms and Conditions 2.a thru 2.g and Sections II, III, IV and V.
	OAC rule 3745-21-09(O)(6)(b)	This emissions unit is exempt from the requirements of OAC rule 3745-21-09(O)(2) thru (O)(5). See Additional Term and Condition 2.h.
	OAC rule 3745-31-05 (PTI 01-6328)	1.92 lbs/hr of organic compounds (OC) no more than 520 hours of operation per month no more than 175 gallons of cleaning solvent employed per month

2. Additional Terms and Conditions

- 2.a** The permittee shall ensure that the chilled air blanket temperature (in degrees F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.
- 2.b** The permittee shall reduce room draft to ensure that the flow or movement across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time measured using the procedure described in the "Monitoring and/or Recordkeeping Requirements" section of this permit. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.
- 2.c** The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.
- 2.d** The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- 2.e** 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. Additional Terms and Conditions (continued)

- 2.f The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.g The solvent cleaning machine shall have a primary condenser.
- 2.h The rule citation reflects the new exemption added to OAC rule 3745-21-09(O) for solvent metal cleaning operations subject to federal MACT standards under 40 CFR, Subpart T, provided the requirements of that Subpart T are specified in the terms and conditions. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for VOC.

II. Operational Restrictions

- 1.
 - a. 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 meter per minute (3 feet per minute) or less.
 - b. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - c. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Ohio EPA, Central District Office.
 - d. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
 - e. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
 - f. 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.
 - g. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - h. The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Ohio EPA, Central District Office to achieve the same or better results as those recommended by the manufacturer.
 - i. The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR Part 63, Appendix A if requested during an inspection by the Ohio EPA, Central District Office.
 - j. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
 - k. Sponges, fabric, wood, and paper products shall not be cleaned.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the hoist speed as described below:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Ohio EPA, Central District Office in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
 - c. Records of the halogenated hazardous air pollutant (HAP) solvent content for the solvent used in the solvent cleaning machine.
3. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. The results of control device monitoring required in this section of the permit.
 - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.
5. The permittee shall conduct an initial monitoring test of the wind speed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:
 - a. Measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine as follows:
 - i. Determine the direction of the wind current in the enclosure by slowly rotating a velometer or similar device inside the entrance to the enclosure until the maximum speed is located.
 - ii. Record the maximum speed.
 - b. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.
6. The permittee shall maintain monthly records of the number of hours the solvent cleaning machine was in operation.

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall maintain monthly records of the number of gallons of solvent used in the solvent cleaning machine.

IV. Reporting Requirements

1. The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:
 - a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463(d)(10)."
 - b. An estimate of solvent consumption during the reporting period.
2. The permittee shall submit an exceedance report on a semiannual basis. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If the temperature of the chilled air blanket, measured at the center of the air blanket, was greater than 30% of the solvent's boiling point, and no correction was made within 15 days of detection, or if no operating 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 cover did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or if the cover had cracks, holes or other defects and no correction was made within 15 days of detection 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 Ohio EPA, Central 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 recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Ohio EPA, Central 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 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.
3. The permittee shall submit semiannual exceedance reports which identify each month during which the number of hours the solvent cleaning machine was in operation exceeded 520 hours, and the actual hours of operation for each such month. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no exceedance has occurred, a statement to that effect shall be submitted.
4. The permittee shall submit semiannual exceedance reports which identify each month during which the number of gallons of cleaning solvent employed in the solvent cleaning machine exceeded 175 gallons, and the actual gallons of solvent employed for each such month. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no exceedance has occurred, a statement to that effect shall be submitted.

V. Testing Requirements

1. 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:

V. Testing Requirements (continued)

- 1.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.

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

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

Where:

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

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

- 1.c** Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.
- 2.** Compliance with the 1.92 lbs OC/hr limit is demonstrated based on the maximum allowable OC emission rate of 5.99 tons OC/year specified in section B.I.1 of this permit and 520 hours of operation/month as follows:
 $(5.99 \text{ tons OC/year}) \times (1 \text{ year}/12 \text{ months}) \times (\text{month}/520 \text{ hours of operation}) \times (2000 \text{ lbs/ton}) = 1.92 \text{ lbs OC/hr}$
- 3.** Compliance with the operating hours limitation of 520 hours per month shall be based on the record keeping specified in section A.III.6 of this permit.
- 4.** Compliance with the solvent usage limitation of 175 gallons of solvent per month shall be based on the record keeping specified in section A.III.7 of this permit.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and reduced room draft	OAC rule 3745-31-05 (PTI 01-6328)	OC emissions shall not exceed 5.99 tons/year.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the total annual liquid volume of cleaning solvent employed each year (gallons) and the total annual liquid volume of cleaning solvent sent off site as waste (gallons).

IV. Reporting Requirements

1. The permittee shall submit an annual report which summarizes the annual total OC emissions as calculated according to the "Testing Requirements" section of this permit. This report shall be submitted to the Ohio EPA, Central District Office by February 1 of each year and shall cover the operations of the solvent cleaning machine for the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of this permit shall be determined in accordance with the following method:

Emission Limitation:
5.99 tons/year OC emissions

Applicable Compliance Method:
To determine the actual organic compound emission rate, the following equation shall be used:

$$E = (L_s - L_w) \times D / 2000$$

E= organic compound emissions rate (tons/year)

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

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

D= density of cleaning solvent (pounds/gallon)

If more than one type of cleaning solvent is employed, the above equation shall be used for each cleaning solvent. The total annual organic compound emission rate shall be determined by the summation of the annual organic compound emission rates for all cleaning solvents.

Facility Name: **Denison Hydraulics, Inc.**
Facility ID: **01-80-01-0110**
Emissions Unit: **Vapor Degreaser (L005)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vapor Degreaser (L006)
Activity Description: Degreasing before PV pump painting

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and idling and downtime mode cover	40 CFR 63.463	See Additional Terms and Conditions 2.a thru 2.h and Sections II, III, IV and V.
	OAC rule 3745-21-09(O)(6)(b)	This emissions unit is exempt from the requirements of OAC rule 3745-21-09(O)(2) thru (O)(5). See Additional Term and Condition 2.i.
	OAC rule 3745-31-05 (PTI 01-6858)	0.41 lb/hr of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The solvent cleaning machine shall maintain an idling emission rate of 0.22 kilogram per hour per square meter (0.045 pound per hour per square foot) of solvent/air interface area as determined using the procedures in 40 CFR 63.465(a) and 40 CFR 63, Appendix A.
- 2.b The permittee shall operate the solvent cleaning machine within the monitoring parameters measured during the idling emission rate test. These parameters are:

- i. The temperature, as measured at the center of the air blanket, less than 60 degrees Fahrenheit; and
- ii. The windspeed across the top of the freeboard area of the solvent cleaning machine not greater than zero (0) feet/minute.

In accordance with 40 CFR 63.468(d)(6)(iv)(B), the results of the idling emission rate test shall be used to demonstrate compliance with the idling emission limit. The idling emission rate test was conducted on February 5, 1997 by Finishing Equipment, Inc. on the same model solvent cleaning machine used at the facility (Finishing Equipment, Inc. Model XLE1-RB3). The results of this test demonstrated compliance with the idling emission limit.

- 2.c The permittee shall ensure that the idling and downtime mode cover is in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover to not be in place. The cover must be able to be readily opened or closed, must completely cover the cleaning machine openings when in place, and must be free of cracks, holes and other defects.
- 2.d The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.

2. Additional Terms and Conditions (continued)

- 2.e The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- 2.f 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.g The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.h The solvent cleaning machine shall have a primary condenser.
- 2.i The rule citation reflects the new exemption added to OAC rule 3745-21-09(O) for solvent metal cleaning operations subject to federal MACT standards under 40 CFR, Subpart T, provided the requirements of that Subpart T are specified in the terms and conditions. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for VOC.

II. Operational Restrictions

- 1.
 - a. 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 meter per minute (3 feet per minute) or less.
 - b. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - c. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Ohio EPA, Central District Office.
 - d. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
 - e. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
 - f. 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.
 - g. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - h. The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Ohio EPA, Central District Office to achieve the same or better results as those recommended by the manufacturer.
 - i. The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR Part 63, Appendix A if requested during an inspection by the Ohio EPA, Central District Office.
 - j. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
 - k. Sponges, fabric, wood, and paper products shall not be cleaned.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the hoist speed as described below:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Ohio EPA, Central District Office in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
 - c. Records of the halogenated hazardous air pollutant (HAP) solvent content for the solvent used in the solvent cleaning machine.
 - d. Records of the idling emission rate test, including the idling emission rate and values of the monitoring parameters measured during the test.
3. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. The results of control device monitoring required in this section of the permit.
 - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.
5. The permittee shall conduct an initial monitoring test of the wind speed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:
 - a. Measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine as follows:
 - i. Determine the direction of the wind current in the enclosure by slowly rotating a velometer or similar device inside the entrance to the enclosure until the maximum speed is located.
 - ii. Record the maximum speed.
 - b. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.

IV. Reporting Requirements

1. The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:
 - a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463(d)(10)."
 - b. An estimate of solvent consumption during the reporting period.
2. The permittee shall submit an exceedance report on a semiannual basis. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If the temperature of the chilled air blanket, measured at the center of the air blanket, exceeds 60 degrees Fahrenheit, and no correction was made within 15 days of detection, or if operating conditions were established under which the wind speed exceeded zero (0) feet/minute and no correction was made within 15 days of detection, or if the cover did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or if the cover had cracks, holes or other defects and no correction was made within 15 days of detection 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 Ohio EPA, Central 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 recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Ohio EPA, Central 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 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.

V. Testing Requirements

1. 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:

V. Testing Requirements (continued)

- 1.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.

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

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

Where:

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

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

- 1.c** Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.
- 2.** Compliance with the 0.41 pound OC/hr limit is demonstrated based on the maximum allowable OC idling emission limit of 0.22 kilogram per hour per square meter (0.045 pound per hour per square foot) of solvent/air interface area specified in 40 CFR 63.463(b)(1)(ii) multiplied by the Vapor Air Interface (VAI) area of L006 (9.06 square feet) as follows:

$$(0.045 \text{ pound OC/per hour} - \text{square foot}) \times (9.06 \text{ square foot}) = 0.41 \text{ pound OC/hr}$$

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor degreaser with refrigeration device and idling and downtime mode cover	OAC rule 3745-31-05 (PTI 01-6858)	OC emissions shall not exceed 1.8 tons/year.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permittee shall maintain records of the total annual liquid volume of cleaning solvent employed each year (gallons) and the total annual liquid volume of cleaning solvent sent off site as waste (gallons).

IV. Reporting Requirements

- The permittee shall submit an annual report which summarizes the annual total OC emissions as calculated according to the "Testing Requirements" section of this permit. This report shall be submitted to the Ohio EPA, Central District Office by February 1 of each year and shall cover the operations of the solvent cleaning machine for the previous calendar year.

V. Testing Requirements

- Compliance with the emission limitation of 1.8 tons OC/year is demonstrated based on the maximum allowable OC idling emission limit of 0.22 kilogram per hour per square meter (0.045 pound per hour per square foot) of solvent/air interface area specified in 40 CFR 63.463(b)(1)(ii) and the Vapor Air Interface (VAI) area of L006 (9.06 square foot) as follows:

$$(0.045 \text{ pound OC/per hour} - \text{square foot}) \times (9.06 \text{ square foot}) \times (8760 \text{ hours of operation/yr}) \times (\text{ton}/2000 \text{ pounds}) = 1.8 \text{ tons OC/yr}$$

VI. Miscellaneous Requirements

None

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