

1

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(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 Ohio Administrative Code (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

2

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

3

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

4

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

Facility Name: **Hadronics, Inc**Application Number: **14-4663**Date: **December 21, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
-------------------------------	-------------------------------------	--------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Hadronics, Inc** located in **Hamilton** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P001	Plating department solvent wipe process and other cleaning operations	OC emission and usage limitations; use of non-photochemically reactive material; compliance with the Air Toxics Policy.	3745-31-05 3745-21-07 (G) 3745-15-07	89.0 pounds OC/day 9.8 TPY OC Exempt. See Additional Special Term and Condition B.2. See General Terms.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	9.8

6

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

7

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

1. Reference the Air Emission Summary page for short-term and long-term emissions limits.
2. The maximum organic compound (OC) content of the cleanup solvent materials, as employed, shall not exceed 8.9 pounds OC per gallon.

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

B. Operational Restrictions

1. The maximum amount of cleanup solvent employed in emissions unit P001 shall not exceed 10 gallons per day and 2200 gallons per year.
2. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C) (5), is prohibited.
3. The permittee shall store any rags used in the solvent wiping process or other facility operations in closed containers with tight fitting covers when the rags are not in use.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for all operations that use cleanup solvent:
 - a. the company identification for each cleanup solvent employed in this emissions unit and whether or not the solvent is photochemically reactive as identified in OAC rule 3745-21-01(C) (5);
 - b. the combined number of gallons of each cleanup solvent employed in all solvent wipe operations;
 - c. the OC content of each cleanup solvent employed, in pounds of OC per gallon of solvent; and,
 - d. the total OC emission rate for all cleanup solvents employed, in pounds per day (sum of b x c for each solvent).
2. The permittee shall collect and record the following information each year for the solvent wipe operation:
 - a. the number of gallons of each cleanup solvent employed;
 - b. the OC content of each cleanup solvent employed, in pounds of OC per gallon of solvent; and,

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

- c. the total OC emission rate for all cleanup solvents employed, in tons per year (sum of a x b / 2000 for each solvent).
3. 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 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the usage limits identified in term B.1. were exceeded, and the actual usages for each such day.
2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the OC content limits identified in term A.2. were exceeded, and the actual OC content for each such day.
3. The permittee shall submit annual reports which specify the total organic compound emissions and total usage of solvent material for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall submit deviation reports which identify each day during which any photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.
5. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Hamilton County Dept. of Env. Services; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

(excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Env. Services.

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 30, April 30, July 30, and October 30 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).

E. Testing Requirements

1. Compliance with the emissions and usage limitations outlined in this permit to install shall be demonstrated by recordkeeping and reporting, as required by terms and conditions in section C. and D of this PTI, 14-4663.
2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the solvents employed.

F. Miscellaneous

1. The terms and conditions of this permit shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-3778 issued on 7/19/95.

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

2. This permit allows the use of the solvent materials specified by the permittee in the application for PTI number 14-4663. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the organic compound emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

Pollutant: Methylene Chloride

TLV (ug/m3): 174,000

Maximum Hourly Emission Rate (lbs/hr): 2.34

Predicted	1	Hour	Maximum	Ground-Level
Concentration(ug/m3): 1538.5				

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4143

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Hamilton County Department of Environmental Services are required, including the possible issuance of modifications to PTI number 14-4663 and the operating permit:

- a. any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table; and,

12

Facility Name: **Hadronics, Inc**

Application Number: **14-4663**

Date: **December 21, 1998**

- c. any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.