

1

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 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: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 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: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 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: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

Facility Name: **Zech Printing Industries**Application Number: **14-4647**Date: **November 4, 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>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Zech Printing Industries** 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>
R005	4-color offset press	Continued use of non-photochemically reactive materials, OC content limits, material usage limitations and compliance with air toxics policy.	3745-15-05 3745-21-07 3745-31-05	See Additional Special Term and Condition F.1. The emission limit established by this rule is less stringent than those established by OAC rule 3745-31-05 (BAT). 27.2 pounds/day OC 4.99 TPY OC

SUMMARY

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 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>
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TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	4.99

7

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 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.

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.

CONSTRUCTION COMPLIANCE CERTIFICATION

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and

conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

- 1. Organic compound emissions from emissions unit R005 shall not exceed 27.2 pounds per day and 4.99 tons per year.
- 2. The following Organic Compound (OC) contents shall not be exceeded for emissions units R005:
 - a. Ink 4 percent by wt. OC
 - b. Roller wash 100 percent by wt. OC
 - c. Blanket wash 100 percent by wt. OC
- 3. The hourly and/or daily emission limitation(s) outlined in this permit are based upon the maximum hourly production/application rate at 24 hours per day. Therefore, no hourly and/or daily records are required.

B. Operational Restrictions

- 1. Material usages shall not exceed the following limits:

	<u>Material Usages</u> <u>Pounds/year</u>
a. Ink	349,962
b. Roller wash	12,300.5
c. Blanket wash	6,150.25

- 2. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C) (5) is prohibited.

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

3. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 50 percent (by weight) from solvents having a vapor pressure of 10 mmHg (0.19 psia) or lower at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in containers with tight fitting covers.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for each emissions unit:
 - a. the company identification number of each ink, roller wash and blanket wash employed in emissions unit R005;
 - b. the percent (%) by weight of the organic compound content of each ink employed in emissions unit R005;
 - c. the percent (%) by weight of the organic compound content of each roller wash and blanket wash employed in emissions unit R005;
 - d. the number of pounds of each ink employed in emissions unit R005;
 - e. the number of pounds of each roller wash and blanket wash employed in emissions unit R005;
 - f. a record of the amount of roller wash recovered which includes the minimum recovery rate in percent by volume and the minimum solids content in percent by volume; and,
 - g. a record of each liquid organic material employed in this emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C) (5).

D. Reporting Requirements

1. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in Additional Special Term and Condition A.2.
2. The permittee shall submit deviation reports which identify all exceedances of the usage limitations in

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

Additional Special Term and Condition B.1..

3. The permittee shall submit annual reports which specify the total usages in pounds from the inks, blanket wash and roller wash for emission units R005. These reports shall be submitted by February 15 of each year and shall cover the previous 12 calendar months.
4. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material (as defined in OAC rule 3745-21-01(C)(5) was employed in emissions units R005. 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 (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

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06).

E. Compliance Methods/Testing Requirements

1. Formulation data or USEPA methods 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC content of the inks and coatings.
2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide No. 68.
3. Compliance with the percent by weight OC content and usage limitations will be determined by the recordkeeping in Additional Special Term and Condition C.1.

F. Miscellaneous

1. If probable cause exist indicating that emissions unit R005 is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3745-15-07, the owner or operator of these emissions units shall be required to submit and implement a control program which will bring this emissions unit into compliance.
2. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 14-4647. 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 established in accordance with the Ohio EPA's "Air Toxics Policy" and 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:

Facility Name: **Zech Printing Industries**

Application Number: **14-4647**

Date: **November 4, 1998**

Pollutant: trimethyl benzene

TLV (mg/m3): 123

Maximum Hourly Emission Rate (lbs/hr): 2.72

**Predicted 1 Hour Maximum Ground-Level Concentration
(ug/m3): 953**

**Maximum Acceptable Ground-Level Concentration (ug/m3):
2929**

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 Dept. of Env. Services are required, including the possible issuance of modifications to PTI number 14-4647 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,
- 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.