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Facility Name: **HGCPC Inc. dba Central Printing-Dayton**

Application Number: **08-3906**

Date: **September 16, 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

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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.

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

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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.

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<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 **HGCPC Inc. dba Central Printing-Dayton** located in **Montgomery** 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>
K004	Harris M1000 Heatset Offset Web Press and Dryer; with catalytic incinerator	*	3745-31-05	13.18 lbs OC/hr excluding cleanup; 17.0 tons OC/yr including cleanup 5% opacity, as a six minute average
			3745-21-07 (G)	See Additional Special Term and Condition B.1.
			3745-21-07 (G) (6)	See Additional Special Term and Condition B.2.
			3745-17-07	less stringent than the opacity limit above

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- * Compliance with applicable OAC rules and allowable emission limits through the catalytic incineration of dryer exhaust with a destruction efficiency of at least 90%; use of non-photochemically reactive materials, recordkeeping and reporting requirements; 5 percent opacity visible emissions limitation.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compounds	17.0

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

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- A. A completed Intent to Test form shall be submitted to the Regional Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.
- C. Tests shall be performed for the following source(s) and pollutant(s):

Source

Pollutant(s)

K001

organic compound

- D. Tests shall include a determination of the uncontrolled mass rate of emissions.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

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 **Regional Air Pollution Control Agency, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

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

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cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. The 13.18 lbs OC/hr limit was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include

information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The dryer-related organic compound emissions from the emission unit, K001, shall be controlled at all times through the application of a catalytic incinerator. The destruction efficiency of the incinerator shall reduce emissions of organic materials such that 90% or more of the carbon in the organic material is incinerated.
3. The average temperature of the exhaust gases immediately before the catalytic incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
4. The hand wash cleanup material is used to clean rollers, blankets and for

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other general purposes. The cleanup cloths shall be stored in closed containers.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors which measure the temperature immediately upstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring devices shall be capable of accurately measuring the desired parameter. The temperature monitors shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. all 3-hour blocks of times (when the emissions unit was in operation) during which the temperature of the exhaust gases immediately before the catalyst bed was less than 750 degrees Fahrenheit;
 - b. all 3-hour blocks of time (when the emissions unit was in operation during which the average temperature difference across the catalyst bed was

less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance; and,
 - c. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall collect and record each month whether or not each ink and fountain solution is a photochemically reactive material.
 3. The actual annual organic compound emission rate, including cleanup, in tons, as calculated in E.1.b.

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4. The permittee shall collect and record the following information each month for the printing operation:
 - a. the company identification for each ink and fountain solution employed;
 - b. the number of gallons of each ink employed;
 - c. the number of gallons of each fountain solution employed;
 - d. the organic compound content of each ink employed, in pounds per gallon;
 - e. the organic compound content of each fountain solution employed, in pounds per gallon;
 - f. the total potential organic compound emission rate for all inks, in pounds, i.e., the sum of (b) x (d);
 - g. the total potential organic compound emission rate for all the fountain solutions, in pounds, i.e., the sum of © x (e);
 - h. the actual organic compound emission rate as calculated in section E.1.a;

5. The permittee shall collect and record each month for the purpose of determining annual organic compound emissions:
 - a. the name and identification for each cleanup material (blanket wash and roller wash) employed;
 - b. the number of gallons of each cleanup material (blanket wash and roller wash) employed;
 - c. the organic compound content of each cleanup material (blanket wash and roller wash) employed, in pounds per gallon;
 - d. the total potential organic compound emission rate for all cleanup

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materials (blanket wash and roller wash), in pounds, i.e., sum of the (b) x (c); and,

- e. the actual organic compound emission rate, in pounds, as calculated in section E.1.b.ii.
6. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

D. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director Regional Air Pollution Control Agency within 30 days of the deviation.
2. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.
3. The permittee shall submit annual reports which specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Compliance Methods and/or Testing Requirements

1. Compliance with the emission limitations in the emission summary shall be determined in accordance with the following methods:
 - a. Emission limitation-
13.18 lbs OC/hr excluding cleanup

Applicable Compliance Method-

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- i. The total potential organic compound emission rate from the ink, shall be multiplied by a factor of 0.80*. The result shall then be multiplied by a factor of 1 minus the destruction efficiency of 0.90 or the efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- ii. The total potential organic compound emission rate from the fountain solution, shall be multiplied by a factor of 0.70*. The result shall then be multiplied by a factor of 1 minus the destruction efficiency of 0.90 or the efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- iii. The total organic compound emission rate from the fountain solution, shall be multiplied by a factor of 0.30*, i.e., a 30 % fugitive emission release.
- iv. The hourly organic compound emission rate, shall then be the sum of the results from (i), (ii), (iii).

b. Emission Limitation-
17 tons OC/yr including cleanup

Applicable Compliance Method-

- i. The total potential organic compound emission rate from the inks (pounds), as required to be recorded in section C.4.f, and summed for the calendar year, shall be multiplied by a factor of 0.80*. The result shall then be multiplied by a factor of 1 minus the destruction efficiency of 0.90 or the efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- ii. The total potential organic compound emission rate from the fountain solution, as required to be recorded in section C.4.g., and summed for the calendar year, shall be multiplied by a factor of 0.70*. The result shall then be multiplied by a factor of 1 minus the

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destruction efficiency of 0.90 or the efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.

- iii. The total organic compound emission rate from the fountain solution, as required to be recorded in section C.4.g., and summed for the calendar year, shall be multiplied by a factor of 0.30*, i.e., a 30 % fugitive emission release.
- iv. The total potential organic compound emission rate from the cleanup material (pounds), as required to be recorded in section C.5.d. and summed for the calendar year, shall be multiplied by a factor of 0.50, 50 %** fugitive emission release.
- v. The annual organic compound emission rate, including cleanup, shall then be the sum of the results from (i), (ii), (iii) and (iv), divided by 2,000 pounds per ton.

* Per DAPC guidance, the following assumptions will be used in calculating the OC emissions for this emissions unit: 20 percent of the ink solvent is retained in the web and the remaining 80 percent is vented to the catalytic incinerator; and 30 percent of the fountain solution emissions is fugitive, and 70 percent is vented to the catalytic incinerator. Until additional emissions tests are conducted, the destruction efficiency of 90% shall be used in this calculation.

** Per DAPC guidance, the cleanup operations can assume 50% of the solvent is retained in the cloths and 50% is emitted as fugitive, if the solvent has a vapor pressure of 10mm Hg or lower at 20 degrees Celsius (68 deg. F.). If the solvent has a vapor pressure greater than 10mm Hg at 20 degrees Celsius (68 deg. F.), then the above guidance does not apply.

- c. Control Measure-
The catalytic incinerator shall have a destruction efficiency of not less than 90%.

Applicable Compliance Method-
Compliance shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10.

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- d. Emission Limitation-
5% opacity, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

- 2. Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the inks, fountain solutions and cleanup materials.