State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
CUYAHOGA COUNTY

Street Address:
122 S. Front Street
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Application No: 13-03864

DATE: 11/15/2001

Fortran Printing, Incorporated
Richard Centa
5777 Grant Avenue
Cleveland, OH 44105

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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. 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

Very truly yours,

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

cc: **USEPA** **CBAPC**

OhioEPA

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 11/15/2001**
Terms and Conditions	**Effective Date: 11/15/2001**

FINAL PERMIT TO INSTALL 13-03864

Application Number:	13-03864
APS Premise Number:	1318008314
Permit Fee:	**$200**
Name of Facility:	Fortran Printing, Incorporated
Person to Contact:	Richard Centa
Address:	5777 Grant Avenue Cleveland, OH 44105

Location of proposed air contaminant source(s) [emissions unit(s)]:
5777 Grant Avenue
Cleveland, **Ohio**

Description of proposed emissions unit(s):
Lithographic and heat-set printing lines.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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).

6. 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.

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

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

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. 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.

13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. 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.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
OC	5.3 (stack)
OC	0.9 (fugitive)
PE	2.41

Emissions Unit ID: **P001**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Heatset, Lithographic printing press controlled by a thermal incinerator.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 1.2 lbs/hr and 5.3 TPY from the stack. Fugitive organic compound emissions shall not exceed 0.9 tpy OC. Particulate emissions shall not exceed 2.41 tpy PE. See Sections A.2.a and A.2.b.
	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11	Particulate emissions shall not exceed 0.551 lb/hr.
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall be reduced by at least 85%, by weight, as an overall control efficiency.
	OAC rule 3745-21-07(G)(6)	Ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

2. Additional Terms and Conditions

2.a Cleanup materials shall not contain any organic compounds.

2.b The limit of 1.2 pounds of OC per hour was established to reflect the maximum hourly potential to emit at the press's maximum ink usage of 3 gallons per hour and maximum fountain solution usage of 0.5 gallons per hour, at 100% coverage and at the maximum speed of the press line. Per Ohio EPA Engineering Guide #56, no particulate emissions testing should be necessary when emissions are controlled by a thermal incinerator. Therefore it is not necessary to develop and maintain daily records of material usage to demonstrate compliance with the hourly limits contained in this permit.

B. Operational Restrictions

1. The average combustion temperature within the thermal 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, or below 1,200 degrees Fahrenheit until such testing has been completed.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit for the purpose of determining annual organic compound emissions:

   a. the name and identification number of each ink and fountain solution employed;

   b. the amount, in gallons, of each ink and fountain solution employed;

   c. the OC content of each ink and fountain solution, in pounds per gallon, as applied; and

   d. the total controlled OC emission rate for all inks and fountain solution, in pounds or ton(s), calculated using the destruction efficiency determined from the most recent performance test that demonstrated that the emissions unit was in compliance, and the formula contained in Section E.1. below; and

   e. the total fugitive OC emission rate for all fountain solution(s) applied, in pounds or tons, calculated using the formula found in Section E.1.below.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the

emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the combustion temperature. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

3. The permittee shall collect and record the following information for each day for the control equipment:

   a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and

   b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance, or below 1,200 degrees Fahrenheit until testing is conducted.

4. The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,200 degrees Fahrenheit until testing is conducted..

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated

emissions unit was in operation. These summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

3. The permittee shall also 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.

4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit, and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Cleveland Bureau of Air Pollution Control by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The permittee shall submit quarterly deviation (excursion) reports, which identify any day in which records of visible emissions are not maintained as required in Section C.4.

6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.

E. Testing Requirements

Compliance with the emission limitation specified in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

1. Emission Limitation

1.2 lbs OC/hr from the stack exhaust from the thermal incinerator, and determination of the total control and incinerator destruction efficiency

Applicable Compliance Method

a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. the emission testing shall be conducted within six months of the effective date of this permit;

ii. the emission testing shall be conducted to demonstrate compliance with the control efficiency limitation for OC emissions, and the allowable hourly OC mass rate of emissions;

iii. Method 25 or 25A of 40 CFR Part 60, Appendix A and the negative pressure determination (Section E.3) shall be employed to demonstrate compliance with the allowable mass emission rate, the control efficiency, and the destruction efficiency;

iv. the tests shall be conducted while the emissions unit is operating at or near its normal operating capacity (in accordance with Engineering Guide #56, and as determined in the pre-test meeting noted below), unless otherwise specified or approved by the Cleveland Bureau of Air Pollution Control;

v. the destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) and the total control efficiency (see capture efficiency, Section E.3) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and USEPA Methods 25 or 25A of 40 CFR Part 60, Appendix A. Formulation data from the manufacturer, or if required Method 24A, shall be used to determine the OC content of the inks and fountain solutions. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases; and

vi. in accordance with Engineering Guide #56, the results of the performance test shall be converted to pounds of OC per hour by multiplying the reported pounds of organic carbon per hour (from Method 25 or 25A) by a ratio of 1.2 pounds of organic material per pound of carbon.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Bureau of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Cleveland Bureau of Air Pollution Control's refusal to accept the results of the emission tests.

In addition, the permittee shall arrange to have a pre-test meeting with the appropriate personnel from the Cleveland Bureau of Air Pollution Control prior to the emission testing date noted above. The purpose of the pre-test meeting shall be to establish an operating scenario for the press being tested which is representative of the actual operating conditions and OC input rate to the control device. The appropriate operating conditions recommended for evaluation by Engineering Guide #56 for the performance test shall be determined prior to the test date.

Personnel from the Cleveland Bureau of Air Pollution Control shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

Emissions Unit ID: **P001**

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Bureau of Air Pollution Control within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Bureau of Air Pollution Control.

b. Initial compliance shall be determined using USEPA Method 25 or 25A from 40 CFR Part 60, Appendix A. Thereafter, compliance shall be determined using the formulas found in Ohio EPA's Engineering Guide #56, applying the destruction efficiency as determined in the testing above, and calculated as follows:

Stack emissions, S, (lbs/hr) from thermal incinerator:

S = (1 - DRE) [0.8(P) + 0.7(FS)]

Fugitive emissions, F, (lbs/hr) from the press:

F = 0.3 (FS)

where,

DRE = the destruction efficiency of the thermal incinerator, expressed as a decimal or percent, which was determined from the most recent performance test which demonstrated compliance with lb/hr emission limitation from the stack; a 90% control efficiency of captured emissions shall be used in the following calculations, until testing has been completed.

P = (ink usage rate gal/hr) x (ink OC content, lbs OC/gal ink);

FS = (fountain solution usage rate, gal/hr) x (fountain solution OC content, lbs OC/gal);

Note: the above emission calculations are based on the use of cleanup material containing zero OCs and non-alcohol fountain solution(s). If the permittee uses fountain solutions or cleanup material (with any OC content) which are different than the materials identified in the permit application, then the formulas for emission calculations shall be adjusted per Ohio EPA's Engineering Guide #56. If these changes in the materials applied, demonstrate that an exceedance of the OC and/or particulate emission limitations contained in this permit would occur, a new PTI application shall be submitted and permit issued before the materials can be applied in the emissions unit.

2. Emission Limitation

5.3 TPY of OC emissions from the stack and 0.9 TPY of fugitive OC emissions

Applicable Compliance Method

The ton per year stack limitation was developed by multiplying the pound per hour OC limit by the maximum operating schedule of 8760 hours/year, and dividing by 2000 lbs/ton. Therefore, a demonstration of compliance with the hourly limit, shall also be a demonstration of compliance with the annual limit. Compliance with the annual fugitive emission limit shall be determined through the record keeping requirements specified in Section C.1. The annual records of fountain

solution usage shall be used to calculate fugitive emissions, as it is derived in Section E.1. [i.e. F = 0.3 (fountain solution usage, gal/year) x (fountain solution OC content, lbs OC/gal)];

3. Minimum overall emission reduction and minimum destruction efficiency (capture efficiency)

The emissions unit shall have no less than 85% overall OC emission reduction (capture and control) and no less than 90% destruction efficiency for OC's

Applicable Compliance Method

a. If the press dryer maintains a negative pressure within the pressroom and the dryer exhausts directly to the control device, the capture efficiency may be assumed to be 100 percent for the VOC's not retained by the substrate or emitted as fugitive emissions. The negative dryer pressure may be demonstrated with either a differential pressure gauge or a smoke test, unless an alternative method is approved by the Cleveland Bureau of Air Pollution Control. If negative pressure cannot be demonstrated using these methods, capture efficiency testing shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M. The permittee may request an alternative method or procedure for the determination of capture efficience in accordance with the USEPA's "Guidelines for Determining Capture Efficiency", dated January 9, 1995. The permittee shall demonstrate that the emissions unit maintains a negative pressure between the pressroom and the dryer and within the dryer, upon initial start-up and whenever a deviation from normal operating conditions occurs.

The permittee can demonstrate that the pressure inside the dryer is always negative relative to the static pressure of the pressroom by either of the following methods:

i. If a differential pressure gauge is used, it shall be installed or placed so that an inlet of the gauge is within the dryer and the other inlet is open to the ambient air in the pressroom. The gauge shall be properly leveled and zeroed according to the manufacturer's instructions. If a mechanical gauge is used, it shall be calibrated against a liquid column gauge, according to manufacturer's instructions. The gauge shall measure a pressure differential of at least 0.007 inches of water column whenever the press is in operation.

ii. If smoke tubes, plastic flow indicating strips, or other flow indicating devices, approved by the Cleveland Bureau of Air Pollution Control, are used to demonstrate compliance with the negative pressure requirement, all points measured with such devices shall indicate airflow into the dryer, and at all openings to the dryer.

b. Compliance with the control and destruction efficiencies shall be determined using USEPA Method 25 or 25A from 40 CFR Part 60, Appendix A, as required in Section E.1.

4. Opacity Limitation

20% opacity as a six-minute average

Applicable Compliance Method

If required, compliance shall be determined using Method 9 of 40 CFR Part 60, Appendix A. In accordance with Engineering Guide #56, if visible emissions develop downwind of the stack, these visible emissions should not be included in Method 9 readings and would not be subject to OAC rule 3745-17-07.

5. Emission Limitation

0.551 lbs PE/hour

Applicable Compliance Method

If required, compliance shall be determined by a performance test in accordance with Method 5 of 40 CFR Part 60, Appendix A. Per the Ohio EPA Engineering Guide #56, no particulate testing should be necessary since this emissions unit is controlled by a thermal incinerator.

6. Emission Limitation

2.41 tpy PE

Applicable Compliance Method

The ton per year limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule of 8760 hours/year, and dividing by 2000 lbs/ton. Compliance with the hourly limit, therefore, shall also be a demonstration of compliance with the annual limit.

F. Miscellaneous Requirements

None