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Facility Name: **Press of Ohio**

Application Number: **16-1815**

Date: **April 21, 1999**

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.

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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.

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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Press of Ohio** located in **Portage** 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.

Cont'd

Ohio
EPA
Source
Number

K002
(Mod)

K001
(Mod)

K001
(Mod)
Cont'd

K002
(Mod)
Cont'd

K001
(Mod)

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K003
(Mod)
Cont' d

K003
(Mod)

K002
(Mod)
Cont' d

K002
(Mod)
Cont' d

K003
(Mod)
Cont' d

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K004
(Mod)

K004
(Mod)
Cont'd

K004
(Mod)
Cont'd

K005
(Mod)
Cont'd

K005
(Mod)
Cont'd

K005
(Mod)

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	Source Identification Description			
	Heatset web offset printing press - Timson 2-unit press no. 201 (increase in allowable mass emissions)		Heatset web offset printing press - Timson 2-unit press no. 202 (increase in allowable mass emissions)	

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	Heatset web offset printing press - Harris M-300 5-unit press no. 206 (increase in allowable mass emissions)			Heatset web offset printing press - Harris M-300 8-unit press no. 207 (increase in allowable mass emissions)

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Heatset web
offset
printing
press -
Harris 8-unit
M-600 press
no. 209

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BAT
Determination

Thermal
incinerator
with an
overall
reduction
efficiency of
85 percent,
when a
photochemicall
y reactive
material is
employed.
Thermal
incinerator
and compliance
with the Air
Toxics Policy.

Thermal
incinerator with
an overall
reduction
efficiency of 85
percent, when a
photochemically
reactive
material is
employed.
Thermal
incinerator and
compliance with
the Air Toxics
Policy.

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Thermal incinerator with an overall reduction efficiency of 85 percent, when a photochemically reactive material is employed. Thermal incinerator and compliance with the Air Toxic Policy.

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Toxic Policy.

Thermal incinerator with an overall reduction efficiency of 85 percent, when a photochemically reactive material is employed. Thermal incinerator and compliance with the Air

Thermal incinerator with an overall reduction efficiency of 85 percent, when a photochemically reactive material is employed. Thermal incinerator and compliance with the Air Toxic Policy.

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				3745-17-11
	Applicable Federal & <u>OAC Rules</u>			3745-31-05
3745-31-05			3745-21-07 (G) (2)	
			3745-21-07 (G) (6)	
			3745-17-07 (A)	

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		3745-31-05		
	3745-21-07 (G) (2)			
3745-31-05				
		3745-31-05		
				3745-21-07 (G) (6)
				3745-17-07 (A)
	3745-21-07 (G) (6)			
	3745-17-07 (A)			3745-17-11
	3745-17-11			
			3745-21-07 (G) (2)	3745-31-05

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	3745-21-07 (G) (6)			
	3745-17-07 (A)			3745-21-07 (G) (2)
	3745-17-11			
	3745-31-05		3745-31-05	
3745-21-07 (G) (2)				3745-21-07 (G) (6)
				3745-17-07 (A)
				3745-17-11

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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>
Permit Allowable Mass Emissions and/or Control/Usage Requirements	combustion emissions). 2.1 pounds/hour and 7.3 tons of OC per rolling 12-month period for stack and/or fugitive emissions from coatings, fountain solutions, and cleanup materials	Natural gas combustion emissions from the incinerator shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO 1.1 pounds/hour and 4.8 TPY NO _x 0.12 pound/hour and 0.5 TPY OC	materials that are not photochemically reactive materials. See A.1. in the Additional Special Terms and Conditions. 20 percent opacity as a six-minute average, except as provided by rule. See A.2. in the Additional Special Terms and Conditions.	for stack and/or fugitive emissions from coatings, fountain solutions, and cleanup materials 0.4 pound/hour PM (including combustion emissions) 1.8 TPY PM (including combustion emissions). The incinerator shall have a destruction efficiency of not less than 90 percent by weight.
12.2 pounds of organic compounds (OC) per hour (pounds/hour) from the incinerator exhaust from combined emissions units K001 through K006 (including)	0.4 pound/hour PM (including combustion emissions). The incinerator shall have a destruction efficiency of not less than 90 percent by weight.	0.64 pound/hour and 2.8 TPY Carbon Monoxide (CO) 0.76 pound/hour and 3.3 TPY Nitrogen Oxides (NO _x) 0.084 pound/hour and 0.4 TPY OC When a photochemically reactive material is employed the emissions of OC shall be reduced by at least 85 percent by weight excluding the emissions of OC from cleanup	12.2 pounds/hour OC from the incinerator exhaust from combined emissions units K001 through K006 (including combustion emissions). 2.1 pounds/hour and 7.3 tons of OC per rolling 12-month period	Natural gas combustion emissions from the incinerator shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO 1.1 pounds/hour and 4.8 TPY NO _x

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0.12 pound/hour and 0.5 TPY OC	our and 0.4 TPY OC When a photochemically reactive material is employed the emissions of OC shall be reduced by at least 85 percent by weight excluding the emissions of OC from cleanup materials that are not photochemically reactive materials.	See A.2. in the Additional Special Terms and Conditions. 12.2 (pounds/hour) OC from the incinerator exhaust from combined emissions units K001 through K006 (including combustion emissions). 6.6 pounds/hour and 23.0 tons per rolling 12-month period OC for stack and/or fugitive emissions from coatings, fountain solutions, and cleanup materials	less than 90 percent by weight. Natural gas combustion emissions from the incinerator shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO 1.1 pounds/hour and 4.8 TPY NO _x 0.12 pound/hour and 0.5 TPY OC Natural gas combustion emissions from the dryer oven shall not exceed the following: 0.55 pound/hour and 2.4 TPY (CO) 0.66 pound/hour and 2.9 TPY (NO _x) 0.073 pound/hour and 0.3 TPY OC	reactive material is employed the emissions of OC shall be reduced by at least 85 percent by weight excluding the emissions of OC from cleanup materials that are not photochemically reactive materials. See A.1. in the Additional Special Terms and Conditions. 20 percent opacity as a six-minute average, except as provided by rule. See A.2. in the Additional Special Terms and Conditions. 12.2 pounds/hour OC from the
0.64 pound/hour and 2.8 TPY Carbon Monoxide (CO) 0.76 pound/hour and 3.3 TPY Nitrogen Oxides (NO _x) 0.084 pound/h	See A.1. in the Additional Special Terms and Conditions. 20 percent opacity as a six-minute average, except as provided by rule.	0.4 pound/hour PM (including combustion emissions) 1.8 TPY PM (including combustion emissions). The incinerator shall have a destruction efficiency of not		

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incinerator exhaust from combined emissions units K001 through K006 (including combustion emissions)	ns, and cleanup materials. 0.4 pound/hour (including combustion emissions). The incinerator shall have a destruction efficiency of not less than 90 percent by weight. Natural gas combustion from the incinerator shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO	0.12 pound/hour and 0.5 TPY OC Natural gas combustion emissions from the dryer oven shall not exceed the following: 0.55 pound/hour and 2.4 TPY CO 0.66 pound/hour and 2.9 TPY NO _x 0.073 pound/hour and 0.3 TPY OC When a photochemically reactive material is employed the emissions of OC shall be reduced by at least 85 percent by weight excluding the emission of OC from cleanup materials that are not photochemically reactive materials. See A.1. in the Additional Special Terms and Conditions. 20 percent opacity as a six-minute average, except as provided by rule.	Terms and Conditions. 12.2 pounds/hour from the incinerator exhaust from combined emissions units K001 through K006 (including combustion emissions) 7.7 pounds/hour and 26.8 tons per rolling 12-month period and/or fugitive emissions from coatings, fountain solutions, and cleanup materials. 0.4 pound/hour PM (including combustion emissions). 1.8 TPY PM (including combustion emissions). The incinerator shall have a destruction efficiency of	not less than 90 percent by weight. Natural gas combustion emissions from the incinerator shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO 1.1 pounds/hour and 4.8 TPY NO _x 0.12 pound/hour and 0.5 TPY OC Natural gas combustion emissions from the dryer oven shall not exceed the following: 0.93 pound/hour and 4.1 TPY CO 1.1 pounds/hour and 4.8 TPY NO _x 0.12 pound/hour and 0.5 TPY OC When a photochemically reactive material is employed the emissions of OC shall be reduced by at least 85 percent by weight excluding

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Ohio EPA Source <u>Number</u>	Source Identification <u>Number</u>	BAT <u>Determination</u>	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage <u>Requirements</u>
the emissio n of OC from cleanup materia ls that are not photoch emicall y reactiv e materia ls.	rule. See A.2. in the Additional Special Terms and Conditions.			
See A.1. in the Additio nal Special Terms and Conditio ns.				
20 percent opacity as a six-min ute average , except as provide d by				

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SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
OC	89.8 (includes 0.5 ton/year incinerator combustion)
PM	9.0
CO	14.5
NO _x	17.2

Note: The facility's total PTE for OC is 99.4 TPY (includes 89.3 tons/year from K001-K005, 0.5 ton/year incinerator combustion and 9.6 tons/year from K006).

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 **Akron Regional Air Quality, 146 South High Street, Room 904, Akron, OH 44308.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the

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shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

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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

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

I. K001, K002, K003, K004, and K005

A. Additional Terms and Conditions

1. The emission limitation specified by OAC rule 3745-21-07(G)(6) is equivalent to the limit established pursuant to OAC rule 3745-31-05.
2. The emission limitation specified by OAC rule 3745-17-11 is less stringent than the limit established pursuant to OAC rule 3745-31-05.

B. Operational Restrictions

1. The maximum annual coating usage, automatic blanket wash cleanup material usage, manual blanket wash cleanup material usage, and concentrated fountain solution usage for the combined emissions units K001, K002, K003, K004, K005, and K006 shall not exceed 1,230 tons per year, 12 tons per year, 90 tons per year, and 123 tons per year, respectively, based upon a rolling, 12-month summation of the usage figures. The usage limitations result in a 96.8 tons of organic compounds (OC) per year emission limitation for K001 through K006. The OC content of the coatings and the concentrated fountain solutions employed shall not exceed 40 percent by weight and 10.3 percent by

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weight, respectively.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

Month (s)	Maximum Allowable Cumulative Coating Usage (Tons)	Maximum Allowable Cumulative Automatic Blanket Wash Cleanup Material Usage (Tons)	Maximum Allowable Cumulative Manual Blanket Wash Cleanup Material Usage (Tons)	Maximum Allowable Cumulative Concentrated Fountain Solution Usage (Tons)
1	128	1.2	9.4	12.8
1-2	256	2.4	18.8	25.6
1-3	385	3.6	28.2	38.4
1-4	513	4.8	37.6	51.2
1-5	641	6.0	47.0	64.0
1-6	769	7.2	56.4	76.8
1-7	897	8.4	65.8	89.6
1-8	1025	9.6	75.2	102.4
1-9	1154	10.8	84.6	115.2
1-10	1230	12.0	90.0	123.0
1-11	1230	12.0	90.0	123.0
1-12	1230	12.0	90.0	123.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual usage limitations shall be based upon a rolling, 12-month summation of the usage figures.

2. The permittee shall only employ manual blanket wash cleanup materials that have a vapor pressure of 10 mm Hg or lower at 20 degrees Celsius (68 degrees Fahrenheit). The permittee shall store the cleanup cloths in closed containers.
3. 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.
4. The dryer oven for each emissions unit shall only employ natural gas.

C. Monitoring and/or Recordkeeping Requirements

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1. The permittee shall collect and record the following information monthly for each emissions unit:
 - a. the company identification for each coating, fountain solution, automatic blanket wash cleanup material and manual blanket wash cleanup material employed;
 - b. documentation as to whether or not each coating, fountain solution, automatic blanket wash cleanup material, and manual blanket wash cleanup material is a photochemically reactive material as defined by OAC rule 3745-21-01(C) (5);
 - c. the amount of each coating, fountain solution, automatic blanket wash cleanup material and manual blanket wash cleanup material employed, in tons;
 - d. the total amount of all coatings, all fountain solutions, all automatic blanket wash cleanup materials, and all manual blanket wash cleanup materials, in tons;
 - e. the OC content of each coating and fountain solution, in weight percent;
 - f. the vapor pressure of each manual blanket wash cleanup material, in millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit);
 - g. the total uncontrolled OC emission rate for all coatings, in tons per month (i.e., the sum of $[(c) \times (e) / 100]$ for each coating);
 - h. the total controlled OC emission rate for all coatings, in tons per month (i.e., $[(0.80) \times (g) \times (1 - \text{destruction efficiency}^*)]^{**}$);
 - i. the total uncontrolled OC emission rate for all fountain solutions, in tons per month (i.e., the sum of $[(c) \times (e) / 100]$ for each fountain solution);
 - j. the total controlled OC emission rate for all fountain solutions, in tons per month (i.e.,

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[(0.3) x (i) + (0.7) (i) (1-destruction
efficiency*)] **);

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- k. the total controlled OC emission rate for all automatic blanket wash cleanup materials, in tons per month (i.e., $[(0.6)(d) + (0.4)(d)(1-\text{destruction efficiency}^*)]**$);
 - l. the total controlled OC emission rate for all manual blanket wash cleanup materials, in tons per month (i.e., $(0.5)(d)**$); and,
 - m. the total OC emission rate for the emissions unit, in tons per month (i.e., the sum of $[(h)+(j)+(k)+(l)]$).
2. If a photochemically reactive material is employed during the month, the permittee shall collect and record the following information monthly for each emissions unit:
- a. the total uncontrolled OC emission rate for all coatings and fountain solutions, in tons per month (i.e., the sum of $[(C.1.g) + (C.1.i)]$);
 - b. the total controlled OC emission rate for all coatings and fountain solutions, in tons per month (i.e., the sum of $[(C.1.h) + (C.1.j)]$);
 - c. the total uncontrolled OC emission rate for all photochemically reactive manual blanket wash cleanup materials, in tons per month;
 - d. the total controlled OC emission rate for all photochemically reactive manual blanket wash cleanup materials, in tons per month (i.e., $(0.5)(c)**$);
 - e. the total uncontrolled OC emission rate for all photochemically reactive automatic blanket wash cleanup materials, in tons per month;
 - f. the total controlled OC emission rate for all photochemically reactive automatic blanket wash cleanup materials, in tons per month (i.e., $[(0.6)(e) + (0.4)(e)(1-\text{destruction efficiency}^*)]**$);
 - g. the total uncontrolled OC emission rate for the emissions unit, in tons per month (i.e., the sum of $[(a) + (c) + (e)]$);

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- h. the total controlled OC emission rate for the emissions unit, in tons per month (i.e., the sum of [(b) + (d) + (f)]); and,
 - i. the reduction of the OC emissions, in weight percent (i.e., $[1-(h/g)] \times 100$).
- 3. The permittee shall collect and record the following information monthly for the combined emissions units K001, K002, K003, K004, K005, and K006:
 - a. the coating usage, fountain solution usage, automatic blanket wash cleanup material usage, and manual blanket wash cleanup material usage for each month, in tons;
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summations of the coating usage figures, fountain solution usage figures, automatic blanket wash cleanup material usage figures, and manual blanket wash cleanup material usage figures for each month, in tons; and,
 - c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative coating, fountain solution, automatic blanket wash cleanup material and manual blanket wash cleanup material usage for each calendar month.
- 4. 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 desired parameter. 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.

The permittee shall collect and record the following

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information for each day:

- a. 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 the emissions unit was in compliance; and,
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
5. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
- a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.
6. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of three 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 the permit. Such records may be maintained in computerized form.
- * The permittee shall use the destruction efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- ** Per Inter Office Communication from Ohio EPA Division of Air Pollution Control dated November

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21, 1996 and based on a successful demonstration of negative pressure in the dryer oven in accordance with Section E.1 of the Additional Special Terms and Conditions, the following assumptions shall be used in calculating the OC emissions for this emissions unit: 20 percent by weight of the solvent in the coatings is retained in the web or substrate and the remaining 80 percent by weight is vented to the incinerator; 30 percent by weight of the fountain solution emissions are fugitive and the remaining 70 percent by weight is vented to the incinerator; 60 percent by weight of the automatic blanket wash cleanup material emissions is fugitive and the remaining 40 percent by weight is vented to the incinerator; and 50 percent by weight of the manual blanket wash cleanup material is retained in the cleanup cloths and the remaining 50 percent by weight is fugitive emissions if the solvent has a vapor pressure of 10 mm Hg or lower at 20 degrees Celsius (68 degrees Fahrenheit).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identifies the following information:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above;
 - b. all exceedances of the rolling, 12-month limitations and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative coating usage levels, automatic blanket wash cleanup material usage levels, manual blanket wash cleanup material usage levels, and concentrated fountain solution usage levels;
 - c. all exceedances of the OC content limitation for any coating and/or any concentrated fountain solution employed; and,
 - d. all deviations of the 85 percent by weight reduction of the OC emissions when employing photochemically reactive material.
2. The permittee shall submit in writing, an annual report to the Director (the Akron Air Pollution Control) which

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specifies the total OC emissions, in tons per year, from each emissions unit for the previous calendar year (January through December). This report shall be submitted by January 31 of each year.

3. 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 Akron Air Pollution Control; 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 Akron Air Pollution Control. 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).

E. Testing Requirements

1. A demonstration of negative pressure differential between the dryer oven shall be conducted within 3 months after the final permit to install is issued to confirm that the assumptions stated in Section C of the Additional Special Terms and Conditions apply to this emissions unit. Such a demonstration may include any or all of the following:

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- a. measurement of actual pressure differential between the dryer oven interior and surrounding room atmosphere using a manometer, magnehelic, or equivalent device;
- b. a demonstration of inward flow at all openings from the dryer oven to room atmosphere, taken at 10-minute intervals for a minimum of 60 minutes; or,
- c. an equivalent protocol proposed by the permittee and approved by the Ohio EPA based on an evaluation of the applicability, necessity, and validity of the alternative, provided such approval does not contravene any other applicable requirement.

If the emissions unit fails to demonstrate negative pressure in the dryer oven, the assumptions detailed in section C of the Additional Special Terms and Conditions shall not apply, and an overall control efficiency of this emissions unit shall be based on capture efficiency testing as described in Section E.2.e below.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. the emission testing shall be conducted by a certain time frame as determined in the Permit to Operate;
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for OC and the capture (verify negative pressure in the dryer oven as described in Section E.1 above) and control efficiencies for OC;
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for OC, Methods 1-4 and 25A 40 CFR Part 60, Appendix A;
 - d. the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on

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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;

- e. if required, the capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.); and,
- f. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron Air Pollution Control.

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3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron 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 test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Akron Air Pollution Control's refusal to accept the results of the emission test(s).
4. Personnel from the Akron 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.
5. 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 Akron 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 Akron Air Pollution Control.
6. Compliance with the emission limitation(s) in Emission Summary and in the Operational Restrictions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation
40 percent by weight OC content for coatings

10.3 percent by weight OC content for concentrated fountain solutions

Applicable Compliance Method

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing)

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inks and related coatings) shall be used to determine the organic compound contents of the coatings and concentrated fountain solutions.

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b. Emission Limitation

12.2 lbs/hr OC from the incinerator from combined emissions units K001 through K006

90 percent by weight destruction efficiency

Applicable Compliance Method

Compliance with the allowable mass emission rate for OC and the control requirement shall be determined in accordance with 40 CFR Part 60, Appendix A Methods 1 through 4 and 25A and the procedures in OAC rule 3745-21-10(C).

c. Emission Limitation

85 percent reduction in OC emissions when employing photochemically reactive material

Applicable Compliance Method

Monthly recordkeeping of the uncontrolled and controlled emission rates for the coatings, fountain solutions, and photochemically reactive cleanup materials as required by Section C.2 of the Additional Special Terms and Conditions and the emissions testing in either Section E.1 or E.2.e above.

d. Emission Limitation

K001 - 2.1 lbs/hr OC
K002 - 2.1 lbs/hr OC
K003 - 6.6 lbs/hr OC
K004 - 6.6 lbs/hr OC
K005 - 7.7 lbs/hr OC

Applicable Compliance Method

The hourly OC emission limit is based upon the emissions unit's potential to emit. Therefore, no recordkeeping, deviation reporting, or emissions calculations are required to demonstrate compliance with this limit.

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e. Emission Limitation

K001 - 7.3 TPY OC
K002 - 7.3 TPY OC
K003 - 23.0 TPY OC
K004 - 23.0 TPY OC
K005 - 26.8 TPY OC

Applicable Compliance Method

Monthly recordkeeping of the coating, fountain solution, and cleanup material usage and the OC content of the coatings and fountain solutions. 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 organic compound contents of the coatings and concentrated fountain solutions.

f. Emission Limitation

K001 - 0.64 lb/hr CO
K002 - 0.64 lb/hr CO
K003 - 0.55 lb/hr CO
K004 - 0.55 lb/hr CO
K005 - 0.93 lb/hr CO
incinerator - 0.93 lb/hr CO

Applicable Compliance Method

Multiply the carbon monoxide emission factor of 84 pound(s) of carbon monoxide emissions per million cubic feet of natural gas by the maximum hourly natural gas Emission factor is from AP-42 5th edition Table 1.4-1 dated 2/98).

g. Emission Limitation

K001 - 2.8 TPY CO
K002 - 2.8 TPY CO
K003 - 2.4 TPY CO
K004 - 2.4 TPY CO
K005 - 4.1 TPY CO
incinerator - 4.1 TPY CO

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Applicable Compliance Method

Multiply the carbon monoxide emission factor of 84 pound(s) of carbon monoxide emissions per million cubic feet of natural gas by the maximum yearly natural gas usage divided by 2000 (Emission factor is from AP-42 5th edition Table 1.4-1 dated 2/98).

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h. Emission Limitation

K001 - 0.76 lb/hr NO_x
K002 - 0.76 lb/hr NO_x
K003 - 0.66 lb/hr NO_x
K004 - 0.66 lb/hr NO_x
K005 - 1.1 lbs/hr NO_x
incinerator - 1.1 lbs/hr NO_x

Applicable Compliance Method

Multiply the nitrogen oxides emission factor of 100 pound(s) of nitrogen oxides emissions per million cubic feet of natural gas by the maximum hourly natural gas usage (Emission factor is from AP-42 5th edition Table 1.4-1 dated 2/98).

i. Emission Limitation

K001 - 3.3 TPY NO_x
K002 - 3.3 TPY NO_x
K003 - 2.9 TPY NO_x
K004 - 2.9 TPY NO_x
K005 - 4.8 TPY NO_x
incinerator - 4.8 TPY NO_x

Applicable Compliance Method

Multiply the nitrogen oxides emission factor of 100 pound(s) of nitrogen oxides emissions per million cubic feet of natural gas by the maximum yearly natural gas usage divided by 2000 (Emission factor is from AP-42 5th edition Table 1.4-1 dated 2/98).

j. Emission Limitation

K001 - 0.084 lb/hr OC
K002 - 0.084 lb/hr OC
K003 - 0.073 lb/hr OC
K004 - 0.073 lb/hr OC
K005 - 0.12 lb/hr OC
incinerator - 0.12 lb/hr OC

Applicable Compliance Method

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Multiply the organic compound emission factor of 11 pound(s) of organic compound emissions per million cubic feet of natural gas by the maximum yearly natural gas usage divided by 2000 (Emission factor is from AP-42 5th edition Table 1.4-2 dated 3/98).

k. Emission Limitation

K001 - 0.4 TPY OC
 K002 - 0.4 TPY OC
 K003 - 0.3 TPY OC
 K004 - 0.3 TPY OC
 K005 - 0.5 TPY OC
 incinerator - 0.5 TPY OC

Applicable Compliance Method

Multiply the organic compound emission factor of 11 pound(s) of organic compound emissions per million cubic feet of natural gas by the maximum yearly natural gas usage divided by 2000 (Emission factor is from AP-42 5th edition Table 1.4-2 dated 3/98).

l. Emission Limitation

K001 - 0.4 lb/hr PM and 1.8 TPY PM
 K002 - 0.4 lb/hr PM and 1.8 TPY PM
 K003 - 0.4 lb/hr PM and 1.8 TPY PM
 K004 - 0.4 lb/hr PM and 1.8 TPY PM
 K005 - 0.4 lb/hr PM and 1.8 TPY PM

Applicable Compliance Method

Stack testing may be required in the future in accordance with the test method(s) and procedures in OAC rule 3745-17-03(B) (10).

m. Emission Limitation

20 percent opacity as a six-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B) (1)

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup

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materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Butyl Cellosolve

TLV (mg/m3): 121

Maximum Hourly Emission Rate (lbs/hr): 25.1

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1970.31

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2880.95

Pollutant: Petroleum Naphtha

TLV (mg/m3): 525

Maximum Hourly Emission Rate (lbs/hr): 25.1

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1970.31

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 12500

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new 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

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in the above table;

- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would 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, the permittee shall obtain a final permit to install prior to the change.

- 2. The terms and conditions in this permit to install 16-1815 shall supersede all the air pollution control requirements for K001 in permit to install 16-422, K002

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in permit to install 16-422, K003 in permits to install
16-422 and 16-1333, K004 in permit to install 16-471,
and permit to install 16-1477.