

Facility ID: 0125040293 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040293 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Heatset web offset printing press with catalytic incinerator	OAC rule 3745-31-05, and see F.1	2.62 lbs/hr organic compounds (OC)* 3.05 tons/yr OC*
		* See A.2.a, A.2.b
		0.01 lb/hr SO2** 0.01 ton/yr SO2**
		0.23 lb/hr NOx** 0.46 ton/yr NOx**
		0.05 lb/hr CO** 0.10 ton/yr CO**
		0.03 lb/hr PM** 0.06 ton/yr PM**

OAC rule 3745-17-07, and see F.1
 OAC rules 3745-17-11, 3745-21-07(G), and see F.1
 ** See A.2.c
 Opacity shall not exceed 20% as a 6-minute average, except as provided by rule.
 The limitations from these rules are equal to or less stringent than the above limitations.

2. Additional Terms and Conditions

- (a)
 - i. Hourly OC emissions limitation of 2.62 lbs/hr is the sum of 0.86 lb/hr stack emissions limit and 1.76 lbs/hr fugitive emissions limit.
 - ii. Annual OC emissions limitation of 3.05 tons/yr is the sum of 1.73 tons/yr stack emissions limit and 1.32 tons/yr fugitive emissions limit.
 The catalytic incinerator shall maintain a minimum destruction efficiency of 90% under maximum operating conditions.
 Limitations for SO2, NOx, CO, and PM were established during development of permit to install 01-5254 for this emissions unit and reflect the unit's potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

B. Operational Restrictions

1. No photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), shall be used in this emissions unit.
2. No fountain solution shall be used in this emissions unit.
3. No roller wash shall be used in this emissions unit.
4. No blanket wash shall be used in this emissions unit.

5. Ink usage shall be limited to 67.5 gallons/day and 16,867 gallons/yr.
 6. OC content of inks shall be no greater than 26% by weight.
 7. Press wash usage shall be limited to 0.50 gallon/day and 150 gallons/yr.
 8. Average OC content of all press wash materials shall be no greater than 76.5%, by weight.
 9. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 171 degrees Fahrenheit.
 10. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 214 degrees Fahrenheit, where 214 degrees Fahrenheit is the temperature calculated to equal 80 percent of the average temperature difference across the catalyst bed during the most recent compliance demonstration.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall operate and maintain continuous temperature monitors and recorders which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Temperature units shall be degrees Fahrenheit.

The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturers' recommendations and good engineering practices.
 2. The permittee shall collect and maintain the following daily records for this emissions unit, and shall retain these records on site for a period of not less than 3 years:
 - a. The average temperature of the exhaust gases immediately before the catalyst bed (when the emissions unit is in operation), in 3-hour increments.
 - b. The average temperature of the exhaust gases immediately following the catalyst bed (when the emissions unit is in operation), in 3-hour increments.
 - c. The temperature difference of the exhaust gases across the catalyst bed of the incinerator when the emissions unit is in operation ((C.2.b)-[C.2.a]), in 3-hour increments.
 - d. The operating time for the exhaust gas capture system, catalytic incinerator, monitoring equipment, and emissions unit (printing line).
 - e. The company identification of the ink and press wash materials employed.
 - f. The quantity of all inks employed, in gallons and lbs.
 - g. The quantity of press wash employed, in gallons and lbs.
- D. Reporting Requirements**
1. The permittee shall submit semi-annual reports to Ohio EPA Central District Office by February 15 and August 15 of each year that shall cover the previous six calendar months (July through December and January through June, respectively). These semi-annual reports shall include the following information:
 - a. An identification of 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 did not comply with the temperature limitations specified in Section B.
 - b. The total operating times for the exhaust gas capture system, catalytic incinerator, monitoring equipment, and emissions unit (printing line).
 2. The permittee shall submit annual reports to Ohio EPA Central District Office by February 15 of each year that shall cover the previous 12 calendar months. These annual reports shall include the following information:
 - a. The total amounts of ink and press wash employed, in both lbs/year and gallons/year.
 - b. An identification of each exceedance of the operating restrictions specified in Section B, and a copy of the daily record documenting the exceedance.
- E. Testing Requirements**
1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation -
2.62 lb OC/hr
3.05 tons OC/yr

Applicable Compliance Method -
If required, OC emissions shall be calculated using the following equations:

Hourly OC emissions = [(hourly ink usage in gallons)(1-0.90)(0.26)(8.3 lb/gal)]+[(hourly ink usage in gallons)(0.05)(0.26)(8.3 lb/gal)]+[(hourly press wash in gallons)(0.765)(6.9 lb/gal)]

Annual OC emissions = [(annual ink usage in gallons)(1-0.90)(0.26)(0.00415 ton/gal)]+[(annual ink usage in gallons)(0.05)(0.26)(0.00415 ton/gal)]+[(annual press wash in gallons)(0.765)(0.00345 ton/gal)]
Emission Limitation -
20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -
If required, compliance shall be demonstrated through stack testing using the methods and procedures

specified in USEPA method 9 (40 CFR 60, Appendix A), in accordance with OAC rule 3745-17-03(B)(1).

Emission Limitation -
0.01 lb/hr SO₂
0.01 ton/yr SO₂

Applicable Compliance Method -

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in natural gas fuel.

Emissions Limitation -
0.23 lb/hr NO_x
0.46 ton/yr NO_x

Applicable Compliance Method -

If required, compliance shall be based upon the AP-42 emission factor of 100 lbs NO_x/MMcu.ft. multiplied by the daily or annual natural gas usage in cubic feet, as appropriate.

Emissions Limitation -
0.05 lb/hr CO
0.10 ton/yr CO

Applicable Compliance Method -

If required, compliance shall be based upon the AP-42 emission factor of 20 lbs CO/MMcu.ft. multiplied by the daily or annual natural gas usage in cubic feet, as appropriate.

Emissions Limitation -
0.03 lb/hr PM
0.06 ton/yr PM

Applicable Compliance Method -

If required, compliance shall be based upon the AP-42 emission factor of 5.0 lbs PM/MMcu.ft. multiplied by the daily or annual natural gas usage in cubic feet, as appropriate.

2. Emissions testing requirement:

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

- i. The emissions testing shall be conducted within 6 months prior to permit renewal.
- ii. The emissions testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for organic compounds.
- iii. The following test method(s) shall be employed to demonstrate compliance with the destruction efficiency limitation: for OC, Method 25 or 25A of 40 CFR Part 60, Appendix A, based on considerations detailed in E.2.a.v, below.
- iv. 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 appropriate Ohio EPA District Office or local air agency.
- v. The destruction 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 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.
Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. 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 Ohio EPA District Office's or Local Air Agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters. A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or Local Air Agency within 30 days following completion of the test(s).

F. **Miscellaneous Requirements**

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 01-5254, as issued on March 13, 1996: Sections A, B, C, D, and E.