

Facility ID: 0250080912 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: 0250080912 Emissions Unit ID: P001 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> |
|--|---|--|
| Electroless Copper Plating & Support Processes | OAC rule 3745-31-05 PTI No: 02-7006 PTI No. 02-7358 | Visible particulate emissions (PE) shall not exceed 5% opacity, as a six-minute average. |
| | | 0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases |
| | | 4.50 pounds per hour and 17.52 tons per year of volatile organic compounds (VOCs) |
| | | 0.40 pound per hour of formaldehyde |
| | OAC rule 3745-17-07 | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-07 | See B.1. |

2. **Additional Terms and Conditions**
 - (a) None

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. 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 rule 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.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - the amount(s) of make-up materials used on a monthly basis;
 - the amount(s) of concentrated (37%) formaldehyde solution used on a monthly basis, in gallons;
 - the volatile organic compound content of each material used;
 - the estimated volatile organic compound emission rate for each material used;
 - the formaldehyde content of each material used; and
 - the number of operating hours per month.
2. The permittee shall calculate and record monthly the average hourly VOC emission rate by summing C.1.d above and dividing by C.1.f.
3. The permittee shall calculate and record monthly the average hourly formaldehyde emission rate by using the following formula, with an emission factor for formaldehyde taken from the Bay Area Air Quality Management District, Printed Circuit Board Manufacturing Operation regulations amended 11/5/01, and the records from C.1:

Formaldehyde emitted/hour = (0.00039 pound of formaldehyde / gallon of concentrated (37%) formaldehyde solution consumed) x gallons consumed per month/hours of operation per month.

D. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any monthly record showing the average hourly VOC emission rate exceeded the allowable rate listed above. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any monthly record showing the average hourly formaldehyde emission rate exceeded the allowable rate listed above. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.

E. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
0.01grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-17-03 (B)(10).
Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with procedures specified in OAC rule 3745-17-03 (B), using the methods and procedures specified in U.S. EPA Reference Method 9.
Emission Limitation:
4.50 pounds/hour and 17.52 tpy of volatile organic compounds (VOCs)

Applicable Compliance Method:
Compliance with the hourly limit shall be based upon the record keeping specified in Section C. Annual emissions also shall be calculated based upon the data recorded pursuant to Section C.
Emission Limitations:
0.40 pound/hour of formaldehyde

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section C.

F. Miscellaneous Requirements

1. None