

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

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 III" and before "I. 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: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

b State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B004 - #3 calendar oil heater;
 K003 - pilot line;
 P003 - embossing line;
 T001 - tank #1: 10,000-gallon plasticizer above ground storage;
 T002 - tank #2: 10,000-gallon plasticizer above ground storage;
 T003 - tank #3: 10,000-gallon plasticizer above ground storage;
 T006 - tank #6: 20,000-gallon plasticizer above ground storage;
 T007 - tank #7: 20,000-gallon plasticizer above ground storage;
 T008 - tank #8: 20,000-gallon plasticizer above ground storage;
 T009 - tank #22: 20,000-gallon plasticizer above ground storage;
 T010 - tank #23: 20,000-gallon plasticizer above ground storage;
 T011 - tank #13: 10,000-gallon double wall horizontal MEK/THF under ground storage;
 T012 - tank #12: 10,000-gallon double wall horizontal MEK/THF under ground storage;
 T013 - tank #18: 10,000-gallon double wall horizontal MEK under ground storage;
 T016 - tank #11: 10,000-gallon double wall horizontal MEK under ground storage;
 T017 - tank #17: 10,000-gallon double wall horizontal MEK under ground storage;
 T018 - tank #16: 10,000-gallon double wall horizontal THF under ground storage;
 T026 - tank #26: 10,000-gallon plasticizer above ground storage;
 T027 - tank #27: 10,000-gallon plasticizer above ground storage;
 Z006 - 8,000-gallon #2 fuel oil tank;
 Z007 - 300,000-gallon #2 fuel oil tank;
 Z008 - stabilizer hand loading station: calendaring;
 Z009 - resin drop points: calendaring;
 Z010 - antimony trioxide station: calendaring;
 Z011 - PVC addition hopper #1: calendaring;
 Z012 - PVC addition hopper #2: calendaring;
 Z013 - plasticizer mix/addition area: calendaring;
 Z014 - PVC/filler recycling station: calendaring;
 Z015 - silo shaker;
 Z016 - annealer;
 Z017 - cold cleaning tank #1;
 Z018 - cold cleaning tank #2;
 Z019 - 2 drum curing ovens;
 Z020 - 2 lab hoods: quality labs;
 Z021 - vacuum former: quality lab;
 Z022 - 5 ovens: quality lab;
 Z023 - 5 lab hoods: R&D lab #1;
 Z024 - 4 mini print machines: R&D lab #1;
 Z025 - mini calendar: R&D lab;
 Z026 - 2 mini mills: R&D lab #1;
 Z027 - oven: R&D lab #1;
 Z028 - oven: R&D lab #2;
 Z029 - 3 lab hoods: R&D lab #2;
 Z030 - sample prep table with hood: R&D lab #2;
 Z031 - print and finish color matching test hood (QA/QC);
 Z032 - Hydro-Tek distillation still;
 Z033 - soup room weight scale;
 Z034 - facility drum mixers;
 Z035 - 800-gallon colored plastisol tank #1: by plastisol line;

Z036 - 800-gallon colored plastisol tank #2: by plastisol line;
Z037 - 800-gallon colored plastisol tank #3: by plastisol line;
Z038 - 800-gallon colored plastisol tank #4: by plastisol line;
Z039 - 800-gallon colored plastisol tank #5: by plastisol line;
Z040 - 800-gallon colored plastisol tank #6: by plastisol line;
Z041 - 1,750-gallon colored plastisol tank #17: by large mixer;
Z042 - 1,550-gallon colored plastisol tank #18: by large mixer;
Z043 - 1,550-gallon colored plastisol tank #19: by large mixer;
Z044 - 750-gallon oil plasticizer tank #11332: new dope room;
Z045 - 750-gallon oil plasticizer tank #11331: new dope room;
Z046 - 1,050-gallon product 037 or 450 tank #11335: new dope room;
Z047 - 1,050-gallon product 037 or 450 tank #11336: new dope room;
Z048 - 2,150-gallon foam tank #11328: new dope room;
Z049 - 2,150-gallon skin tank #11325: new dope room;
Z050 - 1,500-gallon foam surge tank #11324: new dope room;
Z051 - 1,500-gallon skin surge tank #11322: new dope room;
Z052 - 5,600-gallon oil plasticizer 52338 tank #11320: new dope room;
Z053 - 1,350-gallon BFN tank #11317: new dope room;
Z054 - 3,350-gallon pigmented foam tank #11301: new tank area;
Z055 - 3,350-gallon pigmented foam tank #11302: new tank area;
Z056 - 3,350-gallon pigmented foam tank #11303: new tank area;
Z057 - 3,350-gallon pigmented foam tank #11304: new tank area;
Z058 - 3,350-gallon pigmented foam tank #11305: new tank area;
Z059 - 3,350-gallon pigmented foam tank #11306: new tank area;
Z060 - 3,350-gallon pigmented foam tank #11307: new tank area;
Z061 - 3,350-gallon pigmented foam tank #11308: new tank area;
Z062 - 3,350-gallon pigmented foam tank #11309: new tank area;
Z063 - 3,350-gallon clear skin tank #11310: new tank area;
Z064 - 3,350-gallon pigmented foam tank #11311: new tank area;
Z065 - 3,350-gallon clear skin tank #11312: new tank area;
Z066 - 3,350-gallon pigmented foam tank #11313: new tank area;
Z067 - 3,350-gallon clear skin tank #11314: new tank area;
Z068 - 3,350-gallon pigmented foam tank #11315: new tank area;
Z069 - 3,350-gallon clear skin tank #11316: new tank area;
Z070 - 1,250-gallon clear plastisol tank #43: plastisol dope room;
Z071 - 1,350-gallon BFN tank #44: plastisol dope room;
Z072 - 750-gallon BFN tank #45: plastisol dope room;
Z073 - 1,200-gallon BFN tank #46: plastisol dope room;
Z074 - 1,950-gallon clear plastisol tank #100: plastisol dope room;
Z075 - 1,950-gallon clear plastisol tank #101: plastisol dope room;
Z076 - 1,950-gallon clear plastisol tank #102: plastisol dope room;
Z077 - 1,950-gallon clear plastisol tank #103: plastisol dope room;
Z078 - 1,950-gallon clear plastisol tank #104: plastisol dope room;
Z079 - 1,950-gallon clear plastisol tank #105: plastisol dope room;
Z080 - 1,950-gallon clear plastisol tank #106: plastisol dope room;
Z081 - 1,950-gallon clear plastisol tank #107: plastisol dope room;
Z082 - 1,950-gallon clear plastisol tank #108: plastisol dope room;
Z083 - 1,950-gallon clear plastisol tank #109: plastisol dope room;
Z084 - 1,950-gallon clear plastisol tank #110: plastisol dope room;
Z085 - 1,850-gallon clear plastisol tank #111: plastisol dope room;
Z086 - 1,200-gallon pigment tank #21302: plastisol dope room;
Z087 - 800-gallon BFN tank #21388: bulk dope room;
Z088 - 1,300-gallon tank #21354: bulk dope room;
Z089 - 1,300-gallon tank #21353: bulk dope room;
Z090 - 1,600-gallon foams/skins tank #213138: bulk dope room;
Z091 - 1,150-gallon foams/skins tank #21390: bulk dope room;
Z092 - 1,400-gallon BFN tank #21351: bulk dope room;
Z093 - 1,550-gallon skin tank #21395: bulk dope room;
Z094 - 1,550-gallon foam mixer tank: bulk dope room;
Z095 - 550-gallon clear plastisol #21382: bulk dope room;
Z096 - 550-gallon clear plastisol tank #21381: bulk dope room;
Z097 - 3,250-gallon tank #21384: bulk dope room;
Z098 - 3,200-gallon tank #21385: bulk dope room;
Z099 - 750-gallon tank #659: bulk dope room;
Z104 - 750-gallon clear vinyl tank #11: soup room;
Z105 - 750-gallon clear vinyl tank #12: soup room;
Z106 - 750-gallon clear vinyl tank #13: soup room;
Z107 - 750-gallon clear vinyl tank #14: soup room;
Z108 - 750-gallon clear vinyl tank #15: soup room;
Z109 - 750-gallon clear vinyl tank #16: soup room;
Z110 - 750-gallon clear vinyl tank #17: soup room;
Z111 - 750-gallon clear vinyl tank #18: soup room;
Z112 - 750-gallon clear vinyl tank #19: soup room;
Z113 - 750-gallon clear vinyl tank #20: soup room;
Z114 - 750-gallon clear vinyl tank #21: soup room;
Z115 - 1,150-gallon clear vinyl tank #24: soup room;
Z116 - 1,150-gallon clear vinyl tank #25: soup room;
Z117 - 750-gallon clear vinyl tank #26: soup room;
Z118 - 750-gallon clear vinyl tank #27: soup room;
Z119 - 1,150-gallon clear vinyl tank #28: soup room;
Z120 - 150-gallon clear vinyl (MT) tank: soup room;
Z121 - 300-gallon silicone/toluene tank #21209: soup room;
Z122 - 1,100-gallon Hydro-Tek distillation system scrap ink tank;
Z123 - 2 ovens: R&D lab #2;
Z124 - Despatch oven: Development Center;

Z125 - lab hood: Development Center;
Z126 - brabender: Development Center; and
Z127 - pigment mixing operations.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

- [Go to Part III for Emissions Unit B001](#)
- [Go to Part III for Emissions Unit B002](#)
- [Go to Part III for Emissions Unit K001](#)
- [Go to Part III for Emissions Unit K004](#)
- [Go to Part III for Emissions Unit K005](#)
- [Go to Part III for Emissions Unit K006](#)
- [Go to Part III for Emissions Unit K007](#)
- [Go to Part III for Emissions Unit K008](#)
- [Go to Part III for Emissions Unit K009](#)
- [Go to Part III for Emissions Unit K010](#)
- [Go to Part III for Emissions Unit K011](#)
- [Go to Part III for Emissions Unit K012](#)
- [Go to Part III for Emissions Unit K013](#)
- [Go to Part III for Emissions Unit P014](#)
- [Go to Part III for Emissions Unit P018](#)
- [Go to Part III for Emissions Unit Z001](#)
- [Go to Part III for Emissions Unit Z003](#)
- [Go to Part III for Emissions Unit Z004](#)
- [Go to Part III for Emissions Unit Z005](#)

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: B001 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
78 mmBtu boiler fired with natural gas, LPG, or #2 fuel oil	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(K)	1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

2. Additional Terms and Conditions

- a. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall burn only natural gas, LPG, or #2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.0 pound of sulfur dioxide per million Btu of actual heat input. Compliance with this specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include an identification of each day when a fuel other than natural gas, LPG, and/or #2 fuel oil was burned in this emissions unit.
2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons); and
 - b. the calculated sulfur dioxide emission rate (lb/mmBtu) for each shipment of oil received during the calendar month.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
20% opacity as a 6-minute average
Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
0.020 pound of particulate emissions per million Btu of actual heat input
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)(9).
 - c. Emission Limitation:
1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil
Applicable Compliance Method:
Compliance shall be demonstrated through the record keeping requirements specified in section A.III. If required, the permittee shall demonstrate compliance with this limitation in accordance with the method (s) and procedures specified in OAC rule 3745-18-04(E).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: B001 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: B002 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under

state law only.

1. None.

I. 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>
78 mmBtu boiler fired with natural gas, LPG, OAC rule 3745-17-07(A)(1) or #2 fuel oil		See A.1.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(K)	1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

2. Additional Terms and Conditions

- a. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall burn only natural gas, LPG, or #2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.0 pound of sulfur dioxide per million Btu of actual heat input. Compliance with this specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include an identification of each day when a fuel other than natural gas, LPG, and/or #2 fuel oil was burned in this emissions unit.
2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons); and
 - b. the calculated sulfur dioxide emission rate (pounds/mmBtu) for each shipment of oil received during the calendar month.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

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)(9).
 - c. Emission Limitation:

1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in section A.III. If required, the permittee shall demonstrate compliance with this limitation in accordance with the method (s) and procedures specified in OAC rule 3745-18-04(E).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: B002 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K001 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):

(a)

- i. a capture efficiency which is at least 75%, by weight; and
- ii. a control efficiency which is at least 90%, by weight.

- b. The permittee shall operate and maintain the hooding modifications described below:

- i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.

- ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.

- iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

- a.
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.

b. Emission Limitation:

control efficiency of at least 90%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.

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 within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K001 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K004 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:

- i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
- ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
- iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

1. Compliance with the emission limitations in section A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

- a. i. the total pounds of each of the coatings applied at the line tested during the period of the run;
- ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
- iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
- iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
- v. the production rate during the period of the run expressed as square feet of the product per line; and
- vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40

CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.

b. Emission Limitation:

control efficiency of at least 90%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.

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 within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K004 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K005 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
---	--------------------------------------	--

print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.
---	---------------------------	--------------------

2. **Additional Terms and Conditions**

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
 - c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
- 2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- 2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
- 3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

- a.
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.
 - b. Emission Limitation:

control efficiency of at least 90%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.
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 within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.
 - d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K005 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under

state law only.

1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K006 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. **Additional Terms and Conditions**

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

- a.
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to

micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.
- b. Emission Limitation:
 - control efficiency of at least 90%, by weight, for the VOC emissions
 - Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.
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 within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.
 - d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K006 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K007 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
 - c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
- 2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- 2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
- 3. The permittee shall collect and record the following information each day:

- a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
- b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
- c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
- 2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
- 3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - capture efficiency of at least 75%, by weight, for the VOC emissions
 - Applicable Compliance Method:
 - The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
 - The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:
 - Appendix D - "head space" test method
 - (a) Obtaining Sample
 - Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.
 - (b) Solvent Determination
 - (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.
- (c) Calculation
- From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.
- vii. Capture efficiency shall be determined based on the following formula:
- Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:
- VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.
- VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.
- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.
- b. Emission Limitation:
- control efficiency of at least 90%, by weight, for the VOC emissions
- Applicable Compliance Method:
- The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.
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 within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.
- d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.
- Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).
- Personnel from the City of Toledo, Division of Environmental Services 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.
- A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test

method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K007 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K008 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
 - c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

 - (a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- a. (b) Solvent Determination
- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
 - (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.
- (c) Calculation
- From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.
- vii. Capture efficiency shall be determined based on the following formula:
- Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:
- VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.
- VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.
- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.
- b. Emission Limitation:
- control efficiency of at least 90%, by weight, for the VOC emissions
- Applicable Compliance Method:
- The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.
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 within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.
 - d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.
Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).
- Personnel from the City of Toledo, Division of Environmental Services 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.
- A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K008 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K009 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
 - c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

(i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

(ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.

b. Emission Limitation:

control efficiency of at least 90%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.

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 within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K009 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K010 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. **Additional Terms and Conditions**

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
 - c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:
 - a.
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;

- iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:
 - Appendix D - "head space" test method
 - (a) Obtaining Sample
 - Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.
 - a. (b) Solvent Determination
 - (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
 - (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.
 - (c) Calculation
 - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.
 - vii. Capture efficiency shall be determined based on the following formula:
 Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
 where:
 VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.
 VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.
 - a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.
 - b. Emission Limitation:
 - control efficiency of at least 90%, by weight, for the VOC emissions
 - Applicable Compliance Method:
 The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.
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 within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.
 - d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their

maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K010 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K011 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
 - b. The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating application stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- c. The permittee shall operate and maintain a carbon adsorption system with a carbon adsorption capacity of at least 32,000 cubic feet per minute and also shall direct emissions from all lines operating in the

color-matching mode to the carbon adsorption system.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.
2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall operate and maintain an anemometer and recorder, when the emissions unit is in operation and while all other lines are being vented to the control system, which measures and records, on a monthly basis, the average slot air velocity of each topcoat and print head hood over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.
3. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions unit was in compliance; and
 - c. all monitored values of the topcoat and print head hood exhaust rates which do not achieve an average slot air velocity of at least 125 fpm.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all monitored values of the topcoat and print head hood exhaust rates which do not achieve the average slot air velocity specified above.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

capture efficiency of at least 75%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance by showing that the exhaust rate at the topcoat and print head hoods achieves an average slot air velocity of at least 125 feet per minute (fpm). The velocity shall be read by an anemometer over the length of each hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening.

The permittee may demonstrate compliance at a lower average slot velocity by performing emission

testing conducted in accordance with the Consent Order dated May 11, 1987. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour duration each and at the maximum rated line capacity:

- a.
 - i. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - ii. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - iii. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 in the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - iv. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run;
 - v. the production rate during the period of the run expressed as square feet of the product per line; and
 - vi. the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

(a) Obtaining Sample

Eight 3/16" diameter samples are dried out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

a. (b) Solvent Determination

- (i) Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.
- (ii) Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

(c) Calculation

From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

vii. Capture efficiency shall be determined based on the following formula:

Capture efficiency = (VOC exhaust + VOC retained)/VOC applied;
where:

VOC exhaust = VOC in the final oven exhaust directed to the VOC control system from the line during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 25; expressed in pounds per 100 linear yards of product.

VOC retained = VOC retained in the product; determined using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 and described in Section V.1.a.vi. above; expressed in pounds per 100 linear yards of product.

- a. VOC applied = VOC in the coatings applied at the line tested during the period of the run; determined by 40 CFR Part 60, Appendix A, Method 24; expressed in pounds per 100 linear yards of product.

b. Emission Limitation:

control efficiency of at least 90%, by weight, for the VOC emissions

Applicable Compliance Method:

The permittee shall perform emission testing, conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C). 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.

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 within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the capture and control efficiency limitations for VOC: the method(s) specified in section A.V.1.a for capture efficiency and the method specified in section A.V.1.b for control efficiency. Alternative USEPA approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while all of the associated emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the City of Toledo, Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the City of Toledo, Division of Environmental Services. 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 City of Toledo, Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the City of Toledo, Division of Environmental Services 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the City of Toledo, Division of Environmental Services 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 City of Toledo, Division of Environmental Services.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K011 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K012 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
calendering line with compliance coatings	OAC rule 3745-21-09(G)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

- (a) None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain records of the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and

- b. the VOC content of each coating (excluding water and exempt solvents), as applied.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. Compliance with the emission limitation in section A.1.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:
 - 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents
 - Applicable Compliance Method:
 - USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K012 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K013 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
calendering line with compliance coatings	OAC rule 3745-21-09(G)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. **Additional Terms and Conditions**

- (a) None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain records of the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitation in section A.1.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:

2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: K013 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: P014 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
7,500 pounds per hour plastisol line controlled with an electrostatic precipitator	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	9.9 pounds per hour of particulate emissions
	OAC rule 3745-21-09(F)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

- a. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the electrostatic precipitator whenever this emissions unit is in operation.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information each month:

- a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.
2. The permittee shall maintain daily records that document any time periods when the electrostatic precipitator was not in service when the emissions unit was in operation.
 3. 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the ESP was not in service when the emissions unit was in operation.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - 20% opacity as a 6-minute average
 - Applicable Compliance Method:
 - Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
 - 9.9 pounds per hour of particulate emissions
 - Applicable Compliance Method:
 - If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10).
 - c. Emission Limitation:
 - 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents
 - Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-21-10 (B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: P014 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: P018 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
11,375 pounds per hour plastisol line controlled with a thermal incinerator	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	16.5 pounds per hour of particulate emissions
	OAC rule 3745-21-09(F)	See A.I.2.b below.
	OAC rule 3745-31-05(A)(3) (PTI 04-406)	0.11 pound of VOC per gallon of coating, excluding water and exempt solvents, as applied
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
		See A.I.2.c below.

2. Additional Terms and Conditions

- a. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. The permittee shall employ a thermal incinerator for this emissions unit that maintains a minimum control efficiency of 95%, by weight, for particulates and VOC emissions.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or #2 fuel oil in this emissions unit.
2. The permittee shall operate the capture system and thermal incinerator control system whenever this emissions unit is in operation.

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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
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 desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information 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.
3. The permittee shall maintain records of the following information each month:
- a. the name and identification number of each coating; and
 - b. the VOC content of each coating (excluding water and exempt solvents).
4. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in permit to install 04-406, issued on Sept. 9, 1987: section A.III.3. The monitoring and record keeping requirements contained in the above-referenced permit to install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with the requirements constitutes compliance with the underlying monitoring and record keeping requirements in the permit to install.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions units. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify 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.
3. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.
4. The quarterly deviation reports in section A.IV.2 shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

thermal incinerator which demonstrates a minimum control efficiency of 95%, by weight, for particulates and VOC emissions

Applicable Compliance Method:

The most recent stack test that demonstrated compliance (99.5%) was performed on September 15, 1988. If required, 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 Method 5 and Method 18 or 25 of 40 CFR Part 60, Appendix A. 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.

c. Emission Limitation:

0.11 pound of VOC per gallon of coating, excluding water and exempt solvents, as applied

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3. USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

d. Emission Limitation:

16.5 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: P018 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z001 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
pneumatic conveying systems for railcar unloading, truck unloading and bulk handling with 9 fabric filters	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from all of the pneumatic systems shall not exceed 13 pounds per hour.

2. Additional Terms and Conditions

- (a) None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. The permittee shall operate each fabric filter whenever the associated emissions unit is in operation.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records that document any time periods when any fabric filter was not in service when the associated emissions unit was in operation.
- 2. 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 stacks 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which any fabric filter was not in service when the associated emissions unit was in operation.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from each stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

13 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z001 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
--	---	--------------------------------------	--

2. **Additional Terms and Conditions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z003 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
5 ribbon blenders and Banbury mixers for the calendaring system, controlled with a fabric filter	OAC rule 3745-17-07(A)(1)	The visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	11 pounds per hour of particulate emissions (total)
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 pounds per hour and 40 pounds per day (total).

2. **Additional Terms and Conditions**

- (a) None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the fabric filter whenever this emissions unit is in operation.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when the fabric filter was not in service when the emissions unit was in operation.
2. 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall maintain records of the following information for each day for all ribbon blenders and the associated Banbury mixers:
- a. the company identification for each VOC-containing material and photochemically reactive cleanup material employed;
 - b. the number of gallons of each VOC-containing material and photochemically reactive cleanup material employed, in gallons per day;
 - c. the organic compound content of each VOC-containing material and photochemically reactive cleanup material, in pounds per gallon;
 - d. the total organic compound emission rate for all VOC-containing materials and photochemically reactive cleanup materials, in pounds per day (multiply (b) times (c) for each VOC-containing material and photochemically reactive cleanup material and add together);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all VOC-containing materials and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The VOC-containing material information must be for the materials as employed, including any thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
- a. an identification of each day during which the fabric filter was not in service when the associated emissions unit was in operation;
 - b. an identification of each day during which the average hourly organic compound emissions from the VOC-containing materials and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - c. an identification of each day during which the organic compound emissions from the VOC-containing materials and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and

July 31 of each year and shall cover the previous 6-month period.

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

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

11 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).
 - c. Emission Limitation:

8 pounds per hour of organic compounds
40 pounds per day of organic compounds

Applicable Compliance Method:

Compliance with the hourly and daily organic compound emission limitations shall be based upon the record keeping requirements contained in section A.III.3 of this permit.

Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the VOC containing materials and cleanup materials.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z003 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z004 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
automated PVC resin de-bagging operation with fabric filter for no. 41 plastisol line	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the automatic de-bagging system shall not exceed 4.4 pounds per hour.

2. **Additional Terms and Conditions**

- (a) None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate the fabric filter whenever this emissions unit is in operation.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when the fabric filter was not in service when the emissions unit was in operation.
2. 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the fabric filter was not in service when the emissions unit was in operation.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

4.4 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z004 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
---	--------------------------------------	--

2. Additional Terms and Conditions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. Miscellaneous Requirements

- 1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z005 Issuance type: Title V Preliminary Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
two automated PVC resin de-bagging operations with two fabric filters for no. 51 plastisol line	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from both automatic de-bagging systems shall not exceed 14.7 pounds per hour.
	OAC rule 3745-31-05(A)(3) (PTI 04-406)	0% opacity as a 6-minute average
		See A.I.2.b below.

2. Additional Terms and Conditions

- a. The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(1).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. Operational Restrictions

1. The permittee shall operate each fabric filter whenever the associated emissions unit is in operation.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when the fabric filter was not in service when the associated emissions unit was in operation.
2. 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 stacks 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. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the fabric filter was not in service when the associated emissions unit was in operation.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

0% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

14.7 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None

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

Facility ID: 0448010075 Issuance type: Title V Preliminary Proposed Permit

[Go to the top of this document](#)

Facility ID: 0448010075 Emissions Unit ID: Z005 Issuance type: Title V Preliminary Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
---	--------------------------------------	--

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

III. **Monitoring and/or Record Keeping Requirements**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

IV. **Reporting Requirements**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

V. **Testing Requirements**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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

VI. **Miscellaneous Requirements**

1. None