

Facility ID: 1318006552 Issuance type: Title V 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: 1318006552 Issuance type: Title V 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: 1318006552 Issuance type: Title V Proposed Permit

b State Only Enforceable Section

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

B001 - 1.47 MMBtu/Hr Peerless NG Fired Boiler #1 - Administration Building
 B002 - 1.47 MMBtu/Hr Peerless NG Fired Boiler #2 - Administration Building
 B003 - 2.29 MMBtu/Hr Eclipse Process NG Fired Boiler #3 - Plant #1
 B004 - 1.61 MMBtu/Hr L.E.S.Inc./Mfr. by Aldrich NG Fired Boiler #4 - Plant #1
 B005 - < 1 MMBtu/Hr American Standard Backup Process NG Fired Boiler #5
 B006 - 2.50 MMBtu/Hr Crane NG Fired Boiler #6 - Plant #2
 B007 - 6.27 MMBtu/Hr Clayton Process & Plant #6 NG Fired Steam Boiler #7
 B008 - (Z005) 0.675 MMBtu/Hr Bryant NG Fired Boiler #8 - Plant #4
 B009 - (Z006) 1.56 MMBtu/Hr Fulton NG Fired Boiler #9 - Plant #2
 B010 - (Z007) 5.58 MMBtu/Hr Clayton NG Fired Boiler #10 - Plant #6
 F001 - Plant #2 Central Vacuum System Controlled By Cyclone & Baghouse
 N001 - 435 lbs/hr Consumat Controlled-Air Primary & Secondary Burners/Chambers Solid Waste Incinerator - Plant #2
 P004 - 600-gallon & 1600-gallon Plant #1 Blend Vessels with Condenser/ OME or Baghouse and Carbon Adsorber
 P005 - Plant #1 Schold Dispensers Controlled by Cartridge Filter
 P006 - Plant #1 Pilot Plant & HM Two Grinders, Dye Weighing, Controlled by Cartridge Filter
 P019 - Plant #6 Fitz Mill Dye Grinders w/ Baghouse & Cartridge Filter
 P020 - Plant #7 Dye Drying System: Water/amine-based pigment tray dryer, Pilot Rotary Dryer, Vacuum Pump, Crock Filter Controlled by Condenser & Liquid-Ring Vac Pump
 P022 - Plant #7 Five (5) Reactors (5000, 3000, 1000, 300 & 50-gallon) w/ 3 Reflux Condensers & Venturi Scrubber for Odor Control
 P023 - Administration Building R & D Laboratory Hoods
 T032 - 6000-Gallon Plant #1 Acrylic Resin Storage Tank
 T033 - 6000-Gallon Plant #1 Ink Vehicle Storage Tank
 T034 - 6000-Gallon Plant #1 Ink Oil Storage Tank
 T035 - 6000-Gallon Plant #1 Phthalate Plasticizer Storage Tank
 T038 - 6000-Gallon Plant #1 Varnish/Ink Vehicle Storage Tank
 T039 - 6000-Gallon Plant #1 two-compartment Ink Oil Storage Tank
 T040 - 6000-Gallon Plant #1 Tung Oil Storage Tank
 T041 - 4000-Gallon Plant #1 Linseed Oil Storage Tank
 T042 - 6000-Gallon Plant #1 Ink Vehicle Storage Tank
 T043 - 10000-Gallon Plant #6 Methanol Underground Storage Tank
 T044 - 10000-Gallon Plant #6 Waste Methanol Underground Storage Tank
 Z003 - Plant #1 Alkyd Kettle #1 Controlled by a Condenser
 Z004 - Plant #1 Planetary Mixers & Media Mills
 Z008 - Plant #2 VC Blender Controlled by a Rotoclone
 Z009 - Plant #2 Dye Weighing Room Controlled by Fabric Filter
 Z011 - Plant #2 Trash Compactor Controlled by Cartridge Filter
 Z012 - Plant #2 Pigment Repack Room Controlled by Cartridge Filter
 Z013 - Plant #2 Evaporative Cooling Tower
 Z014 - Plant #7 Evaporative Cooling Tower
 Z015 - Plant #1 Blend Vessel Drumming Controlled by Smog Hog/Electrostatic Precipitator
 Z016 - Plant #1 Caustic Tub Washer
 Z017 - Plant #2 T-Resin Pigment Tray Loading Hopper/Receiver Controlled by Cartridge Filter
 Z018 - Plant #2 Jeffrey Mill Hopper Controlled by Cartridge Filter
 Z019 - 2 mixers, 2 kettles and 1 3-roll mill in Pilot Plant

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.

The following insignificant emissions units are located at this facility:

B001 - 1.47 MMBtu/Hr Peerless NG Fired Boiler #1 - Administration Building
B002 - 1.47 MMBtu/Hr Peerless NG Fired Boiler #2 - Administration Building
B003 - 2.29 MMBtu/Hr Eclipse Process NG Fired Boiler #3 - Plant #1
B004 - 1.61 MMBtu/Hr L.E.S.Inc./Mfr. by Aldrich NG Fired Boiler #4 - Plant #1
B005 - < 1 MMBtu/Hr American Standard Backup Process NG Fired Boiler #5
B006 - 2.50 MMBtu/Hr Crane NG Fired Boiler #6 - Plant #2
B007 - 6.27 MMBtu/Hr Clayton Process & Plant #6 NG Fired Steam Boiler #7
B008 - (Z005) 0.675 MMBtu/Hr Bryant NG Fired Boiler #8 - Plant #4
B009 - (Z006) 1.56 MMBtu/Hr Fulton NG Fired Boiler #9 - Plant #2
B010 - (Z007) 5.58 MMBtu/Hr Clayton NG Fired Boiler #10 - Plant #6
F001 - Plant #2 Central Vacuum System Controlled By Cyclone & Baghouse
N001 - 435 lbs/hr Consumat Controlled-Air Primary & Secondary Burners/Chambers Solid Waste Incinerator - Plant #2
P004 - 600-gallon & 1600-gallon Plant #1 Blend Vessels with Condenser/ OME or Baghouse and Carbon Adsorber
P005 - Plant #1 Schold Dispensers Controlled by Cartridge Filter
P006 - Plant #1 Pilot Plant & HM Two Grinders, Dye Weighing, Controlled by Cartridge Filter
P019 - Plant #6 Fitz Mill Dye Grinders w/ Baghouse & Cartridge Filter
P020 - Plant #7 Dye Drying System: Water/amine-based pigment tray dryer, Pilot Rotary Dryer, Vacuum Pump, Crock Filter Controlled by Condenser & Liquid-Ring Vac Pump
P022 - Plant #7 Five (5) Reactors (5000, 3000, 1000, 300 & 50-gallon) w/ 3 Reflux Condensers & Venturi Scrubber for Odor Control
P023 - Administration Building R & D Laboratory Hoods
T032 - 6000-Gallon Plant #1 Acrylic Resin Storage Tank
T033 - 6000-Gallon Plant #1 Ink Vehicle Storage Tank
T034 - 6000-Gallon Plant #1 Ink Oil Storage Tank
T035 - 6000-Gallon Plant #1 Phthalate Plasticizer Storage Tank
T038 - 6000-Gallon Plant #1 Varnish/Ink Vehicle Storage Tank
T039 - 6000-Gallon Plant #1 two-compartment Ink Oil Storage Tank
T040 - 6000-Gallon Plant #1 Tung Oil Storage Tank
T041 - 4000-Gallon Plant #1 Linseed Oil Storage Tank
T042 - 6000-Gallon Plant #1 Ink Vehicle Storage Tank
T043 - 10000-Gallon Plant #6 Methanol Underground Storage Tank
T044 - 10000-Gallon Plant #6 Waste Methanol Underground Storage Tank
Z003 - Plant #1 Alkyd Kettle #1 Controlled by a Condenser
Z004 - Plant #1 Planetary Mixers & Media Mills
Z008 - Plant #2 VC Blender Controlled by a Rotoclone
Z009 - Plant #2 Dye Weighing Room Controlled by Fabric Filter
Z011 - Plant #2 Trash Compactor Controlled by Cartridge Filter
Z012 - Plant #2 Pigment Repack Room Controlled by Cartridge Filter
Z013 - Plant #2 Evaporative Cooling Tower
Z014 - Plant #7 Evaporative Cooling Tower
Z015 - Plant #1 Blend Vessel Drumming Controlled by Smog Hog/Electrostatic Precipitator
Z016 - Plant #1 Caustic Tub Washer
Z017 - Plant #2 T-Resin Pigment Tray Loading Hopper/Receiver Controlled by Cartridge Filter
Z018 - Plant #2 Jeffrey Mill Hopper Controlled by Cartridge Filter
Z019 - 2 mixers, 2 kettles and 1 3-roll mill in Pilot Plant

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 P001](#)
- [Go to Part III for Emissions Unit P002](#)
- [Go to Part III for Emissions Unit P003](#)
- [Go to Part III for Emissions Unit P007](#)
- [Go to Part III for Emissions Unit P008](#)
- [Go to Part III for Emissions Unit P009](#)
- [Go to Part III for Emissions Unit P014](#)
- [Go to Part III for Emissions Unit P015](#)
- [Go to Part III for Emissions Unit P021](#)

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

Facility ID: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P001 Issuance type: Title V 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>
P001 - plant #1 ink base, ink and toner pigments manufacturing line - a 400-lb and a 800-lb kettle in parallel, transfer equipment, holding tubs, and two (2) parallel 3-roll mills - all the equipment except the mills are covered and vented directly to a packed tower scrubber and a venturi scrubber, in series. The mills are hooded and then vented to the packed tower scrubber, then the venturi scrubber. (The venturi scrubber is also shared with emissions unit P002.)	OAC rule 3745-21-07(G)(2)	Organic compound (OC) emissions shall not exceed 8 lbs per hour and 40 lbs per day or the permittee shall achieve an overall reduction of 85%, by weight, of the OCs from this emissions unit.
	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the venturi scrubber stack shall not exceed 1.15 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the venturi scrubber stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- a. The venturi scrubber serving this emissions unit is shared with P002. This permit requires said venturi scrubber to be tested for PE. During the emission testing, P001 shall be operated at maximum capacity and all equipment possible in P002 also shall be operated, in order to load the scrubber as heavily as possible.
- (a) To determine compliance with the hourly PE limitation, the allowable emission rate for P002 shall be added to the allowable emission rate from P001. If the tested hourly PE rate is less than this calculated figure, both emissions units shall be deemed to be in compliance. If the tested hourly PE emissions rate exceeds this figure, both emissions units shall be deemed to be out of compliance.
- b. All the OC emissions and PE from all the equipment comprising this emissions unit shall be vented to the packed tower scrubber and venturi scrubber.

[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 rate of recirculation of the scrubbing liquor to the packed tower scrubber shall be maintained at a minimum of 80 gallons per minute (gpm) when the emissions unit is in operation. After each round of

emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.

2. The pH of the scrubbing liquor in the packed tower scrubber shall be maintained at a minimum of 10.0. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum pH value based upon the operation of the scrubber during the last emissions test.
3. The pressure drop across the venturi scrubber shall be maintained at a minimum of 5 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new pressure drop value based upon the operation of the scrubber during that emissions test.
4. The scrubber liquor recirculation rate to the venturi scrubber shall be continuously maintained at a minimum value of 70 gallons per minute at all times while the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.

[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 properly operate and maintain equipment to monitor the packed tower scrubber recirculation flow rate and the pH of the scrubber liquor, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. beginning 90 days from the effective date of this permit the scrubber liquor recirculation flow rate, in gallons per minute, on a twice-per-shift basis, but not less than 4 hours apart during each shift;
- b. the scrubber liquor pH; and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across the venturi scrubber, as well as the scrubber liquor recirculation flow rate while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber;
- b. the scrubber liquor recirculation flow rate, in gallons per minute, on a twice-per-shift basis, but not less than 4 hours apart during each shift; and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.

3. The permittee shall collect and record the following information each day for this emissions unit to calculate the OC emitted in lbs/hour average and lbs/day in accordance with sections A.V.1.d & 1.e:

- a. the name and identification of each product produced;
- b. the pounds of each product produced per batch;
- c. the total OC emissions for all product batches produced, in pounds;
- d. the number of hours of operation; and
- e. the average hourly OC emission rate in pounds per hour.

Should the facility commit to complying with the alternative OC limitation of 85% overall control of OC emissions, this monitoring and record keeping requirement shall not be applicable.

4. The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the venturi scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

[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 each day during which the following packed tower scrubber parameters were not maintained within the required levels:
 - a. the scrubber liquor recirculation flow rate; and
 - b. the pH of the scrubber liquor.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following venturi scrubber parameters were not maintained within the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber liquor recirculation flow rate.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the lbs OC/hour and/or lbs OC/day emission rates (calculated from records maintained by A.III.3 above) did not comply with the OC limitations specified above.
4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the venturi scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.15 pounds PE per hour

Applicable Compliance Method:
Compliance with this emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(10).
 - b. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - c. Emission Limitation:
8 pounds OC/hour

Applicable Compliance Method:
The pounds OC per hour may be calculated from records required in Section A.III.3 by using the following formula:

$$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions test for the worst case product]})}{\text{hours of operation}} = \text{lbs OC emitted/hour}$$

During the last OC emissions test an emission rate of 0.00038 lb OC/lb of product was documented.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).
 - d. Emission Limitation:
40 pounds OC/day

Applicable Compliance Method:

The pounds OC per day may be calculated from records required in Section A.III.3 by using the following formula:

$$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions test for the worst case product]})}{\text{lbs OC emitted/day}}$$

During the last OC emissions test an emission rate of 0.00038 lb/lb of product was documented.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).

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 15 months of the issuance of this permit and within 6 months prior to permit expiration.

b. The initial round of emission testing shall be conducted on the outlet of the venturi scrubber to demonstrate the OC emission rate (in lbs/hour and lb/lb product) from the venturi scrubber stack for the worst case product, to determine the actual PE rate in lbs/hour from the venturi scrubber, to determine the OC emissions rate of the inlet to the packed tower scrubber for the calculation of the overall OC control efficiency for the worst case product, and to establish proper operating values for the pressure drops, pH, and scrubber liquor recirculation rates (in gpm) for both scrubbers. After the initial round of testing, the permittee may determine which OC emission limitation they will continue to demonstrate compliance with, and the subsequent rounds of emissions testing may be modified accordingly. Also, during the first round of testing, if the permittee speciates the organic compounds during the test and demonstrates that all organics emitted are formaldehyde, subsequent OC testing may be conducted for only formaldehyde.

c. The following test methods shall be employed: 40 CFR Part 60, Appendix A, Method 316 for formaldehyde, Method 25 for OC, Method 18 to speciate OC, Method 5 for PE, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while emissions units P001 and P002 are operating at or near their maximum capacities, unless otherwise specified or approved by the Cleveland Division of Air Quality. (Some of this equipment is operated only once every 18-24 months.) The permittee also shall perform tests of the uncontrolled emissions from emissions units P001 and P002 to ensure that the controlled emissions from the venturi scrubber can be properly allocated to each emissions unit.

e. 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 A.V.2.b. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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

Personnel from the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P001 Issuance type: Title V 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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P002 Issuance type: Title V 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>
P002 - manufacture of colorants: plant #1	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit

three (3) mixers or dispersers, one (1) small kettle used only as a holding tank and one oven on Chem Floor vented to a venturi scrubber, which is shared with P001.

shall not exceed 2.13 lb/hr.

OAC rule 3745-17-08(B)
 OAC rule 3745-17-07(A)(1)

 OAC rule 3745-17-07(B)(1)

See Section A.I.2.a below
 Visible particulate emissions from the venturi scrubber stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
 Visible fugitive emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average.

2. Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures in order to prevent the fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following:
 - (a)
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. collection efficiencies that are sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
 - b. This emissions unit consists of six pieces of equipment which may operate independently of each other. The PE limitation for this emissions unit was determined by adding together the process weight rate from each and applying that to Table I.

The venturi scrubber serving this emissions unit is shared with P001. This permit requires said venturi scrubber to be tested for PE. During the emission testing, P001 shall be operated at maximum capacity and all equipment possible in P002 also shall be operated, in order to load the scrubber as heavily as possible.

To determine compliance with the hourly PE limitation, the allowable emission rate for P002 shall be added to the allowable emission rate from P001. If the tested hourly PE rate is less than this calculated figure, both emissions units shall be deemed to be in compliance. If the tested hourly PE emissions rate exceeds this figure, both emissions units shall be deemed to be out of compliance.
 - c. The PE from all equipment comprising this emissions unit shall be vented to the venturi scrubber.
 - d. By the effective date of this permit, the permittee shall permanently remove the one small kettle from service as part of this emissions unit.
 - e. The permittee shall employ the oven only to evaporate water from any solid 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.

II. Operational Restrictions

- 1. The pressure drop across the venturi scrubber shall be maintained at a minimum of 5 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new pressure drop value based upon the operation of the scrubber during that emissions test.
- 2. The scrubber liquor recirculation rate to the venturi scrubber shall be continuously maintained at a minimum of 70 gallons per minute at all times while the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.

[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 properly operate and maintain equipment to monitor the static pressure drop across the venturi scrubber, as well as the scrubber liquor recirculation flow rate while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

 - a. the pressure drop across the scrubber;
 - b. the scrubber liquor recirculation flow rate, in gallons per minute, on a twice-per-shift basis, but not less than 4 hours apart during each shift; and
 - c. the downtimes for the capture (collection) system, control device, and monitoring equipment 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 venturi scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

3. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from 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 identify all periods of time during which the following venturi scrubber parameters were not maintained within the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber liquor recirculation flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
3. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the venturi scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
2.13 pounds PE per hour

Applicable Compliance Method:
Compliance with this emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule

3745-17-03(B)(10).

- b. Emission Limitation:
20% opacity as a 6-minute average (stack)
- Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.
- c. Emission Limitation:
20% opacity as a 3-minute average (fugitive)
- Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. For purposes of verifying compliance with this limitation, visible emission observations shall be performed at all non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.
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 15 months of the issuance of this permit and within 6 months prior to permit expiration.
- b. The initial round of emission testing shall be conducted to determine the hourly PE rate from the venturi scrubber, the hourly OC emission rate and to establish proper operating values for the pressure drop and scrubber liquor recirculation rate (in gpm) for the venturi scrubber.
- c. The following test methods shall be employed: 40 CFR Part 60, Appendix A, Method 5 for PE, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The tests shall be conducted while emissions units P001 and P002 Re operating at or near their maximum capacities, unless otherwise specified or approved by the Cleveland Division of Air Quality. (Some of this equipment is operated only once every 18-24 months.) The permittee also shall perform tests at the uncontrolled emissions from emissions units P001 and P002 to ensure that the controlled emissions from the venturi scrubber can be properly allocated to each emissions unit.
- Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. 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 Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).
- Personnel from the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P002 Issuance type: Title V 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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P003 Issuance type: Title V 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>
---	--------------------------------------	--

P003: plant #1 Hi-Solv mixers: 2 high shear (30 HP) mixers and a Schold mixer - vented to a 1200 cfm Tri-Mer 12H Whirl Wet scrubber.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 1.49 lb/hr.
--	---------------------------	--

OAC rule 3745-17-08(B)	See A.I.2.a.
OAC rule 3745-17-07(A)(1)	Visible emission from the scrubber stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-21-09 (QQ)(2)	See A.I.2.c.

2. Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures in order to prevent the fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following:
 - (a)
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. collection efficiencies that are sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
 - b. All the equipment comprising this emissions unit shall be vented to the wet scrubber.
 - c. Each mixing vessel having a capacity of four hundred gallons or less shall be equipped with a lid that remains in place at all times unless the vessel is empty or being emptied. The lid shall maintain contact along the entire perimeter of the vessel's rim and shall have no openings except as follows:
 - (i) the opening for the mixer shaft shall be no larger than three inches in diameter; and
 - (ii) any opening used for the addition of materials to the vessel shall be no more than one-fourth of the lid area in size and shall remain open only during the addition of 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.

II. Operational Restrictions

- 1. The pressure drop across the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 4 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new pressure drop value based upon the operation of the scrubber during that emissions test.
- 2. The water feed rate to the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 60 gallons per hour (1 gpm) at the inlet to the scrubber when the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber water feed rate based upon the operation of the scrubber during that emissions test.

[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 properly operate and maintain equipment to monitor the static pressure drop across the Tri-Mer Whirl Wet scrubber, as well as the water recirculation rate to the scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

 - a. the pressure drop across the scrubber, in inches of water column, on a twice-per-shift basis, but not less than 4 hours apart during each shift;
 - b. the water flow rate to the scrubber, in gallons per minute, on a twice-per-shift basis, but not less than 4 hours apart during each shift; and
 - c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.
- 2. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from 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 perform checks daily, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

[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 periods of time during which the pressure drop and the scrubber water feed rate were not maintained at or above the required values.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
3. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.49 pound PE per hour

Applicable Compliance Method:
If required, compliance with the mass emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 5 and the procedures specified in OAC rule 3745-17-03(B).
 - b. Emission Limitation:
20% opacity as a 6-minute average from the scrubber stack

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - c. Emission Limitation:
20% opacity as a 3-minute average (fugitive)

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. For purposes of verifying compliance with this limitation, visible

emission observations shall be performed at all non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P003 Issuance type: Title V 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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P007 Issuance type: Title V 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>
P007: five (5) electrically heated, thermoset pigment, Grieve tray curing ovens vented to a venturi scrubber and a tray tower scrubber, in series. All 5 ovens are directly vented into the venturi scrubber. The exhaust of the venturi scrubber vents directly into the tray tower scrubber.	OAC rule 3745-31-05(A)(3) (PTI #13-01058)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(1), OAC rule 3745-17-08(B), OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(1).
	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 1.4 lb/hr.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the tray tower scrubber stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-21-07(G)(1)	This emissions unit shall not discharge more than fifteen (15) pounds of organic compounds (OC) into the atmosphere in any one day, nor more than three (3) pounds in any one hour, unless such emissions have been reduced by at least 85%, by weight.

2. Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures in order to prevent the fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following:
 - (a)
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. collection efficiencies that are sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.

[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 pressure drop across the venturi scrubber shall be maintained at a minimum of 7 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new pressure drop range based upon the operation of the scrubber during that emissions test.
- 2. The scrubber liquor recirculation rate for the venturi scrubber shall be continuously maintained at a value of not less than 70 gallons per minute at all times while the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubbing liquor recirculation rate based upon the operation of the scrubber during that emissions test.
- 3. The rate of recirculation of the scrubber liquor to the tray tower scrubber shall be maintained at or over 10 gallons per minute (gpm) when the emissions unit is in operation. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements,

the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.

4. The pH of the scrubber liquor in the tray tower scrubber, when the emissions unit is in operation, shall be maintained at a minimum value of 10.0. After each round of emissions testing which demonstrated that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum pH value of the scrubber liquor based upon the operation of the scrubber during that emissions test.

[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 properly operate and maintain equipment to continuously monitor the static pressure drop across the venturi scrubber, as well as the scrubber liquor recirculation flow rate, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water column, twice per shift (not less than 4 hours apart during each shift);
- b. the scrubber liquor recirculation flow rate, in gallons per minute, twice per shift (not less than 4 hours apart during each shift); and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to continuously monitor the tray tower scrubber liquor recirculation flow rate, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the scrubber liquor recirculation flow rate, in gallons per minute, twice per shift (not less than 4 hours apart during each shift); and
- b. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the tray tower liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pH of the scrubber liquor, twice per shift (not less than 4 hours apart during each shift); and
- b. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

4. The permittee shall collect and record the following information each day for this emissions unit to calculate the OC emitted in lbs/hour average and lbs/day in accordance with sections A.V.1.d & 1.e:

- a. the name and identification of each product produced;
- b. the pounds of each product produced per batch;
- c. the total OC emissions for all product batches produced, in pounds;
- d. the number of hours of operation; and
- e. the average hourly OC emission rate in pounds per hour.

Should the facility commit to complying with the alternative OC limitation of 85% overall control of OC emissions, this monitoring and record keeping requirement shall not be applicable.

5. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from 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. Notwithstanding the frequency of reporting requirements specified in A.III.4., the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any abnormal visible emissions are observed.

6. 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 scrubber 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. the total duration of any visible emission incident; and
- c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

[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 periods of time during which the following venturi scrubber parameters were not maintained within the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber liquor recirculation flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following tray tower scrubber parameters were not maintained within the required levels:
 - a. the scrubber liquor recirculation flow rate; and
 - c. the pH of the scrubber liquor.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the lbs OC/hour and/or lbs OC/day emission rates (calculated from records maintained by A.III.4. above) did not comply with the OC limitations specified above.
4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the tray tower scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
1.4 pound PE per hour
- Applicable Compliance Method:
If required, compliance with the mass emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 5 and the procedures specified in OAC rule 3745-17-03(B).
- b. Emission Limitation:
20% opacity as a 6-minute average (stack)
- Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.
- c. Emission Limitation:
20% opacity as a 3-minute average (fugitive)
- Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. For purposes of verifying compliance with this limitation, visible emission observations shall be performed at all non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.
- d. Emission Limitation:
3 pounds OC/hour
- Applicable Compliance Method:
The pounds OC per hour may be calculated from records required in Section A.III.4 by using the following formula:
- $$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions test for the worst case product]})}{\text{hours of operation}} = \text{lbs OC emitted/hour}$$
- During the last OC emissions test an emission rate of 0.00044 lb/lb of product was documented.
- If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).
- e. Emission Limitation:
15 pounds OC/day
- Applicable Compliance Method:
The pounds OC per day may be calculated from records required in Section A.III.4 by using the following formula:
- $$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions testing for the worst case product]})}{\text{hours of operation}} = \text{lbs OC emitted/day}$$
- During the last OC emissions test an emission rate of 0.00044 lb/lb of product was documented.
- If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).
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 18 months of the issuance of this permit and within 6 months prior to permit expiration.
- b. The initial round of emission testing shall be conducted on the outlet of the tray tower scrubber to demonstrate the OC emission rate (in lbs/hour and lb/lb product) from the tray tower scrubber stack for the worst case product, to determine the actual PE rate in lbs/hour from the tray tower scrubber, to determine the OC emissions rate of the inlet to the venturi scrubber for the calculation of the overall OC control efficiency for the worst case product, and to establish proper operating values for the pressure drops, pH, and scrubber liquor recirculation rates (in gpm) for both scrubbers. After the initial round of testing, the permittee may determine which OC emissions limitation they will continue to demonstrate compliance with, and the subsequent rounds of emissions testing may be modified accordingly. Also during the first round of testing, if the permittee speciates the organic compounds during the test and demonstrates that all organics emitted are formaldehyde, subsequent OC testing may be conducted for only formaldehyde.
- c. The following test methods shall be employed: 40 CFR Part 60, Appendix A, Method 316 for formaldehyde, Method 25 for OC, Method 18 to speciate OC, Method 5 for PE, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The tests shall be conducted while the emissions unit is operating at or near the maximum capacity, unless otherwise specified or approved by the Cleveland Division of Air Quality.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 A.V.2.b. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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

Personnel from the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P007 Issuance type: Title V 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>
---	--------------------------------------	--

P007: five (5) electrically heated, thermoset pigment, Grieve tray curing ovens vented to a venturi scrubber and a tray tower scrubber, in series. All 5 ovens are directly vented into the venturi scrubber. The exhaust of the venturi scrubber vents directly into the tray tower scrubber.	Director's Final Findings & Orders dated 3/28/91 and with no expiration date	See B.I.2.a. See B.I.I.1.
--	--	------------------------------

- 2. **Additional Terms and Conditions**

- a. The permittee shall emit no air contaminant or combination of air contaminants in such manner or amounts as to endanger the health, safety, or welfare of the public, or cause unreasonable injury or damage to property, as specified in OAC rule 3745-15-07.

[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 follow the Ohio EPA-approved (March 28, 1991 letter from Mr. Thomas Rigo) operator training program for the proper operation and maintenance of the control equipment, as described in the above-referenced Director's Final Findings & Orders, or such alternative program approved by the Cleveland Division of Air Quality that is consistent with the Final Findings & Orders.

[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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P008 Issuance type: Title V 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>
P008: no. 1 kettle system for manufacturing thermoplastic/thermoset resin pigments, vented to a Tri-Mer Whirl Wet dust collector and packed tower scrubber, in series.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 1.7 lb/hr.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from this scrubber stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)(2)	This emissions unit shall not discharge more than forty (40) pounds of organic compounds (OC) into the atmosphere in any one day, nor more than eight (8) pounds in any one hour, unless such discharge is reduced by at least 85%, by weight.

2. **Additional Terms and Conditions**

- a. All the OC emissions and PE from all the equipment comprising this emissions unit shall be vented to the Tri-Mer wet scrubber and packed tower scrubber.

[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 pressure drop across the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 4 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the

permittee may establish a new pressure drop range based upon the operation of the scrubber during that emissions test.

2. The scrubber liquor recirculation rate for the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 60 gallons per hour. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubbing liquor recirculation rate based upon the operation of the scrubber during that emissions test.
3. The scrubber liquor recirculation rate of the packed tower scrubber shall be maintained at a minimum of 10 gallons per minute (gpm) when the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.
4. The pH of the scrubber liquor in the packed tower scrubber, when the emissions unit is in operation, shall be maintained at a minimum of 10.0. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum pH value of the scrubber liquor based upon the operation of the scrubbers during that emissions test.

[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 properly operate and maintain equipment to monitor the static pressure drop across the Tri-Mer Whirl Wet scrubber, as well as the scrubber water flow rate, while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the Tri-Mer Whirl Wet scrubber, in inches of water column, twice per shift (not less than 4 hours apart during each shift);
- b. the water flow rate to the scrubber, in gallons per minute, twice per shift for the fresh make-up city water (not less than 4 hours apart during each shift); and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the packed tower scrubber liquor recirculation rate and pH, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the scrubber liquor recirculation rate, in gallons per minute, twice per shift (not less than 4 hours apart during each shift);
- b. the pH; and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall collect and record the following information each day for this emissions unit to calculate the OC emitted in lbs/hour average and lbs/day in accordance with sections A.V.1.d & 1.e:

- a. the name and identification of each product produced;
- b. the pounds of each product produced per batch;
- c. the total OC emissions for all product batches produced, in pounds;
- d. the number of hours of operation; and
- e. the average hourly OC emission rate in pounds per hour.

Should the facility commit to complying with the alternative OC limitation of 85% overall control of OC emissions, this monitoring and record keeping requirement shall not be applicable.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the packed tower scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

[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 periods of time during which the following Whirl Wet scrubber parameters were not maintained within the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following packed tower scrubber parameters were not maintained within the required levels:
 - a. the pH; and
 - b. the scrubbing liquor recirculation rate to the scrubber.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the lbs OC/hour and/or lbs OC/day emission rates (calculated from records maintained by A.III.4. above) did not comply with the OC limitations specified above.
4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the packed tower scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.7 pound PE per hour

Applicable Compliance Method:
If required, compliance with the mass emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 5 and the procedures specified in OAC rule 3745-17-03(B).
 - b. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - c. Emission Limitation:
8 pounds OC/hour

Applicable Compliance Method:
The pounds OC per hour may be calculated from records required in Section A.III.3 by using the following formula:

$$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions test for the worst case product]})}{\text{hours of operation}} = \text{lbs OC emitted/hour}$$

During the last OC emissions test an emission rate of 0.00032 lb/lb of product was documented.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).

An emission factor of 0.00032 lb OC emitted per lb product was developed by Day-Glo and their consultant URS based on post-control continuous monitoring of formaldehyde (HCHO) for January-February 2001. The HCHO concentration used in this calculation was determined by taking the average of the top ten HCHO concentrations recorded in this time frame. All the emissions are assumed to be

HCHO. Emissions = duct velocity * density of air * HCHO concentration * operating hours.

- d. Emission Limitation:
40 pounds OC/day

Applicable Compliance Method:

The pounds OC per day may be calculated from records required in Section A.III.3 by using the following formula:

$$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions testing for the worst case product]})}{= \text{lbs OC emitted/day}}$$

An emission factor of 0.00032 lb OC emitted per lb product was developed by Day-Glo and their consultant URS based on post-control continuous monitoring of formaldehyde (HCHO) for January-February 2001. The HCHO concentration used in this calculation was determined by taking the average of the top ten HCHO concentrations recorded in this time frame. All the emissions are assumed to be HCHO. Emissions = duct velocity * density of air * HCHO concentration * operating hours.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).

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 of the issuance of this permit for either emissions unit P008 or P009 and within 6 months prior to permit expiration for the other emissions unit.

b. The initial round of emission testing shall be conducted on the outlet of the packed tower scrubber to demonstrate the OC emission rate (in lbs/hour and lb/lb product) from the packed tower scrubber stack for the worst case product, to determine the actual PE rate in lbs/hour from the packed tower scrubber, to determine the OC emissions rate at the inlet to the Tri-Mer wet scrubber for the calculation of the overall OC control efficiency for the worst case product, and to establish proper operating values for the pressure drops, pH, and scrubber liquor recirculation rates (in gpm) for both scrubbers. After the initial round of testing, the permittee may determine which OC emissions limitation they will continue to demonstrate compliance with, and the subsequent rounds of emissions testing may be modified accordingly. Also during the first round of testing, if the permittee speciates the organic compounds during the test and demonstrates that all organics emitted are formaldehyde, subsequent OC testing may be conducted for only formaldehyde.

c. The following test methods shall be employed: 40 CFR Part 60, Appendix A, Method 316 for formaldehyde, Method 25 for OC, Method 18 to speciate OC, Method 5 for PE, as appropriate. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at or near the maximum capacity, unless otherwise specified or approved by the Cleveland Division of Air Quality.

e. 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 A.V.2.b. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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

Personnel from the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P008 Issuance type: Title V 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>
P008: plant #2 no. 1 kettle system for manufacturing thermoplastic/thermoset resin pigments vented to a Tri-Mer Whirl Wet dust date collector and packed tower scrubber, in series.	Director's Final Findings & Orders dated 3/28/91 and with no expiration	See B.I.2.a. See B.II.1.

2. Additional Terms and Conditions

- a. The permittee shall emit no air contaminant or combination of air contaminants in such manner or amounts as to endanger the health, safety, or welfare of the public, or cause unreasonable injury or damage to property, as specified in OAC rule 3745-15-07.

[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 follow the Ohio EPA-approved (March 28, 1991 letter from Mr. Thomas Rigo) operator training program for the proper operation and maintenance of the control equipment, as described in the above-referenced Director's Final Findings & Orders, or such alternative program approved by the Cleveland Division of Air Quality that is consistent with the Final Findings & Orders.

[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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P009 Issuance type: Title V 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>
P009: plant #2 no. 2 kettle system for manufacturing thermoplastic/thermoset resin pigments, vented to a Tri-Mer Whirl Wet wet dust collector and a packed tower scrubber, in series.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 1.7 lb/hr.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the packed tower scrubber stack, shall not exceed 20 % opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)(2)	This emissions unit shall not discharge more than forty (40) pounds of organic compounds (OC) into the atmosphere in any one day, nor more than eight (8) pounds in any one hour, unless said emissions are reduced by 85 % overall.

2. Additional Terms and Conditions

- a. All the OC emissions and PE from all the equipment comprising this emissions unit shall be vented to the Tri-Mer wet scrubber and packed tower scrubber.

[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 pressure drop across the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 4 inches of water column when the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new pressure drop range based upon the operation of the scrubber during that emissions test.
2. The scrubber liquor recirculation rate of the Tri-Mer Whirl Wet scrubber shall be maintained at a minimum of 60 gallons per hour. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubbing liquor recirculation rate based upon the operation of the scrubber during that emissions test.
3. The scrubber liquor recirculation rate of the packed tower scrubber shall be maintained at a minimum of 10 gallons per minute (gpm) when the emissions unit is in operation. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum scrubber liquor recirculation rate based upon the operation of the scrubber during that emissions test.
4. The pH of the scrubber liquor in the packed tower scrubber during the production reaction and cooling of the formaldehyde-base pigments shall be maintained at a minimum of 10. After each round of emissions testing which demonstrate that the emissions unit was operating in compliance with the applicable requirements, the permittee may establish a new minimum pH value of the scrubber liquor based upon the operation of the scrubbers during that emissions test.

[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 properly operate and maintain equipment to monitor the static pressure drop across the Tri-Mer Whirl Wet scrubber, as well as the water flow rate, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the Tri-Mer Whirl Wet scrubber, in inches of water column, twice per shift (not less than 4 hours apart during each shift);
- b. the water flow rate, in gallons per minute, twice per shift (not less than 4 hours apart during each shift); and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the

emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the packed tower scrubber liquor recirculation rate and pH, while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the scrubbing liquor recirculation rate, in gallons per minute, twice per shift (not less than 4 hours apart during each shift);
 - b. the pH; and
 - c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.
3. The permittee shall collect and record the following information each day for this emissions unit to calculate the OC emitted in lbs/hour average and lbs/day in accordance with sections A.V.1.d & 1.e:
 - a. the name and identification of each product produced;
 - b. the pounds of each product produced per batch;
 - c. the total OC emissions for all product batches produced, in pounds;
 - d. the number of hours of operation; and
 - e. the average hourly OC emission rate in pounds per hour.

Should the facility commit to complying with the alternative OC limitation of 85% overall control of OC emissions, this monitoring and record keeping requirement shall not be applicable.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the packed tower scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

[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 periods of time during which the following Whirl Wet scrubber parameters were not maintained within the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following packed tower scrubber parameters were not maintained at the required levels:
 - a. the scrubbing liquor recirculation rate; and
 - b. the pH.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
4. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the lbs OC/hour and/or lbs OC/day emission rates (calculated from records maintained by A.III.4. above) did not comply with the OC limitations specified above.
5. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the packed tower scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.7 pound PE per hour

Applicable Compliance Method:
Compliance with this emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(10).
 - b. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - c. Emission Limitation:
8 pounds OC/hour

Applicable Compliance Method:
The pounds OC per hour may be calculated from records required in Section A.III.3 by using the following formula:

$$\frac{(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions test for the worst case product]})}{\text{hours of operation}} = \text{lbs OC emitted/hour}$$

An emission factor of 0.00032 lb OC emitted per lb product was developed by Day-Glo and their consultant URS based on post-control continuous monitoring of formaldehyde (HCHO) for January-February 2001. The HCHO concentration used in this calculation was determined by taking the average of the top ten HCHO concentrations recorded in this time frame. All the emissions are assumed to be HCHO. Emissions = duct velocity * density of air * HCHO concentration * operating hours.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).
 - d. Emission Limitation:
40 pounds OC/day

Applicable Compliance Method:
The pounds OC per day may be calculated from records required in Section A.III.3 by using the following formula:

$$(\text{lbs product/day}) (\text{lb OC emitted/lb product [from the latest emissions testing for the worst case product]}) = \text{lbs OC emitted/day}$$

An emission factor of 0.00032 lb OC emitted per lb product was developed by Day-Glo and their consultant URS based on post-control continuous monitoring of formaldehyde (HCHO) for January-February 2001. The HCHO concentration used in this calculation was determined by taking the average of the top ten HCHO concentrations recorded in this time frame. All the emissions are assumed to be HCHO. Emissions = duct velocity * density of air * HCHO concentration * operating hours.

If required, emissions testing shall be performed in accordance with OAC rule 3745-21-10 (C).
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 of the issuance of this permit for either emissions unit P008 or P009 and within 6 months prior to permit expiration for the other emissions unit.
 - b. The initial round of emission testing shall be conducted on the outlet of the packed tower scrubber to demonstrate the OC emission rate (in lbs/hour and lb/lb product) from the packed tower scrubber for the worst case product, to determine the actual PE rate in lbs/hour from the packed tower scrubber, to determine the OC emissions rate at the inlet to the Tri-Mer wet scrubber for the calculation of the overall OC control efficiency for the worst case product, and to establish proper operating values for the pressure drops, pH, and scrubber liquor recirculation rates (in gpm) for both scrubbers. After the initial round of testing, the permittee may determine which OC emissions limitation they will continue to demonstrate compliance with, and the subsequent rounds of emissions testing may be modified accordingly. Also during the first round of testing, if the permittee speciates the organic compounds during the test and demonstrates that all organics emitted are formaldehyde, subsequent OC testing may be conducted for only formaldehyde.
 - c. The following test methods shall be employed: 40 CFR Part 60, Appendix A, Method 316 for formaldehyde, Method 25 for OC, Method 18 to speciate OC, Method 5 for PE, as appropriate. Alternative

U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 d. The tests shall be conducted while this emissions unit is operating at or near the maximum capacity, unless otherwise specified or approved by the Cleveland Division of Air Quality.

e. 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 A.V.2.b. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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

Personnel from the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P009 Issuance type: Title V 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>
---	--------------------------------------	--

P009: plant #2 no. 2 kettle system for manufacturing thermoplastic/thermoset resin pigments, vented to a Tri-Mer Whirl Wet wet date dust collector and a packed tower scrubber, in series.	Director's Final Findings & Orders dated 3/28/91 and with no expiration	See B.I.2.a. See B.II.1.
--	---	-----------------------------

2. **Additional Terms and Conditions**

- a. The permittee shall emit no air contaminant or combination of air contaminants in such manner or amounts as to endanger the health, safety, or welfare of the public, or cause unreasonable injury or damage to property, as specified in OAC rule 3745-15-07.

[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 follow the Ohio EPA-approved (March 28, 1991 letter from Mr. Thomas Rigo) operator training program for the proper operation and maintenance of the control equipment, as described in the above-referenced Director's Final Findings & Orders, or such alternative program approved by the Cleveland Division of Air Quality that is consistent with the Final Findings & Orders.

[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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P014 Issuance type: Title V 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>
P014: plant #2 three (3) pigment grinders, 3 pneumatic conveyors with 11 fine grinding system feed hoppers, each vented to a bin vent cartridge filter	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 3.8 lb/hr.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stacks shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

- a. All of the emissions from the equipment comprising this emissions unit shall be vented to the bin vent filters.

[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 perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the bin vent filters 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

[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 semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the bin vents 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
3.80 pounds per hour of particulate emissions

Applicable Compliance Method:
If required, compliance with this emissions limitation shall be determined through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-10 (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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P014 Issuance type: Title V 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>
P014: plant #2 three (3) pigment grinders, 3 pneumatic conveyors with 11 fine grinding system feed hoppers, each vented to a bin vent cartridge filter	Director's Final Findings & Orders dated 3/28/91 and with no expiration date	See B.I.2.a. See B.II.1.

2. Additional Terms and Conditions

- a. The permittee shall emit no air contaminant or combination of air contaminants in such manner or amounts as to endanger the health, safety, or welfare of the public, or cause unreasonable injury or damage to property, as specified in OAC rule 3745-15-07.

[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 follow the Ohio EPA-approved (March 28, 1991 letter from Mr. Thomas Rigo) operator training program for the proper operation and maintenance of the control equipment, as described in the above-referenced Director's Final Findings & Orders, or such alternative program approved by the Cleveland Division of Air Quality that is consistent with the Final Findings & Orders.

[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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P015 Issuance type: Title V 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>
P015: plant # 2 five (5) pigment grinders, 6 product blenders vented to a cartridge filter product collector equipped with a bag break detector and vented to a Tri-Mer wet scrubber.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 3.8 lb/hr.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the wet collector stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

2. Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures in order to prevent the fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following:
 - (a)
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. collection efficiencies that are sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
 - b. All of the equipment comprising this emissions unit shall be vented to the wet scrubber.

[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 pressure drop across the Tri-Mer wet scrubber shall be maintained at a minimum of 7 inches of water column while the emissions unit is in operation.
2. The scrubber make up water flow rate shall be maintained at not less than 0.5 gallon per minute at all times while the 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 properly operate and maintain equipment to monitor the static pressure drop across the Tri-Mer Whirl wet scrubber, as well as the make up water flow rate while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual.

The permittee shall collect and record the following information each day:

 - a. the pressure drop across the scrubber, in inches of water column, on a twice-per-shift basis (not less than 4 hours apart);
 - b. the make up water flow rate, in gallons per minute, on a twice-per-shift basis (not less than 4 hours apart); and
 - c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.
2. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from 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. Notwithstanding the frequency of reporting requirements specified in A.III.2., the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any abnormal visible emissions are observed.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubber 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

[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 each day during which the following scrubber parameters were not maintained at the required levels:
 - a. the scrubber make up water flow rate; and
 - b. the pressure drop across the scrubber.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
3. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber 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 Cleveland DAQ) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:
20% opacity as a 3-minute average (fugitive)

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. For purposes of verifying compliance with this limitation, visible emission observations shall be performed at all non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

- c. Emission Limitation:
3.8 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance with this emissions limitation shall be determined through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-10 (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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P015 Issuance type: Title V 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>
P015: plant # 2 five (5) pigment grinders, 6 product blenders vented to a cartridge filter product collector equipped with a bag break detector and vented to a Tri-Mer wet scrubber.	Director's Final Findings & Orders dated 3/28/91 and with no expiration date	See B.I.2.a. See B.II.1.

2. **Additional Terms and Conditions**

- a. The permittee shall emit no air contaminant or combination of air contaminants in such manner or amounts as to endanger the health, safety, or welfare of the public, or cause unreasonable injury or damage to property, as specified in OAC rule 3745-15-07.

[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 follow the Ohio EPA-approved (March 28, 1991 letter from Mr. Thomas Rigo) operator training program for the proper operation and maintenance of the control equipment, as described in the above-referenced Director's Final Findings & Orders, or such alternative program approved by the Cleveland Division of Air Quality that is consistent with the Final Findings & Orders.

[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: 1318006552 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

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

Facility ID: 1318006552 Emissions Unit ID: P021 Issuance type: Title V 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>
P021: filter system - plant #7 consisting of a cylindrical vertical Funda tree (a horizontal plate pressure) filter for separation and cleaning dye solids from solvent (methanol) by filtration, a filter overflow tank, a large rotary vacuum tumble dryer, methanol solvent recovery by chilled glycol condenser, methanol receiving vessel, associated vacuum pump (vacuum system) and a minimally operated Torit cartridge filter exhausting inside the plant.	OAC rule 3745-17-11(B)(1)	3.99 lbs PE/hour See A.I.2.b.
	OAC rule 3745-17-08(B)	See A.I.2.a.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stacks shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-21-09 (QQ)(1)	The filtration process which separates the methanol from the solid dye shall be a vacuum system which consists of a vacuum pump and condenser.

2. Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures in order to prevent the fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following:

- (a)
 - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. collection efficiencies that are sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
- b. When dry materials are added to the rotary drier, the rotary drier shall be vented to the Torit filter. When finished product is dropped from the bottom of the Funda filter, the filter shall be vented to the Torit filter. At no time shall the Torit filter emit more than 3.99 lbs PE per hour.
- c. The OC emissions from all the equipment comprising this emissions unit shall be vented to the condenser.

[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 average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be greater than 35.6 degrees Fahrenheit.

[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 perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the Torit filter 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.

Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any visible emissions are observed.

2. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from 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. Notwithstanding the frequency of reporting requirements specified in A.III.2., the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:

- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to readings of daily if any abnormal visible emissions are observed.

4. By not later than 90 days after the effective date of this permit, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for the thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within + 1 percent of the temperature being measured or + 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with

the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information for the condenser for each day:

- a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day when this emissions unit is operating.
- b. The downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the Torit filter 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 Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the condenser exceeded the temperature limitation specified above.

[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(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
3.99 lbs/hour from the Torit filter

Applicable Compliance Method:
If required, compliance with this emissions limitation shall be determined through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-10 (B)(10).
 - b. Emission Limitation:
20% opacity as a 6-minute average (stack)

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - c. Emission Limitation:
20% opacity as a 3-minute average (fugitive)

Applicable Compliance Method:
If required, compliance with the visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. For purposes of verifying compliance with this limitation, visible emission observations shall be performed at all non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.
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 within 9 months of the issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the hourly OC and methanol emission rates and the average temperature of the exhaust gases from the condenser.
 - c. The following test method(s) shall be employed to demonstrate compliance: 40 CFR Part 60, Appendix A, Methods 1-4 and Method 25 and/or 18 for OC and methanol. Alternative US-EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Division of Air Quality. All stack emissions shall be tested.
Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. 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 Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).

Personnel from the Cleveland Division of Air Quality shall be permitted to witness the tests, 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 emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Division of Air Quality within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

[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: 1318006552 Issuance type: Title V Proposed Permit

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

Facility ID: 1318006552 Emissions Unit ID: P021 Issuance type: Title V 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