State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

01/23/04

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

13-18-00-6552
Day-Glo Color Corp.
Robert A. Mitchell
Day-Glo Color Corp.
4515 Saint Clair Ave.
Cleveland, OH 44103

Dear Robert A. Mitchell:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Cleveland Division of Air Pollution Control.

Sincerely,

Michael W. Ahern

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: Cleveland Division of Air Pollution Control
File, DAPC PMU

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **01/23/04**	Effective Date: **02/13/04**	Expiration Date: **02/13/09**

This document constitutes issuance of a Title V permit for Facility ID: 13-18-00-6552 to:
Day-Glo Color Corp.
Day-Glo Color Corp.
4515 Saint Clair Ave.
Cleveland, OH 44103

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

P001 (P001, Plant 1 Kettles)
Ink & Base Manufacture

P002 (P002, Plant 1 Pilot & Chem Floor)
Plant #1Pilot Plant and Chem Floor Mixers

P003 (P003, High-Speed Dispersers)
Plant #1 Hi-Solv Dispersers

P007 (P007, Plant 2 Curing Ovens)
Plant #2 T-series Curing Ovens

P008 (P008, Plant 2 Pigment Kettle)
Plant #2 Kettle #1

P009 (P009, Plant 2 Pigment Kettle)
Plant #2 Kettle #2

P014 (P014, Coarse Grinding)
Plant #2 Coarse Pigment Grinding System

P015 (P015, Fine Grinding)
Plant #2 Fine Grinding System

P021 (P021, Filter & Rotary Dryer)
Plant #7 Funda Filter and Rotary Dryer

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.
ii. The date(s) analyses were performed.
iii. The company or entity that performed the analyses.
iv. The analytical techniques or methods used.
v. The results of such analyses.
vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be

submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.
(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:
(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local

air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. Beginning no later than January 1, 2006, the emissions of hazardous air pollutants (HAPs), as defined in Section 112(b) of Title III of the Clean Air Act, from all the emissions units at this facility, shall not exceed 9.7 TPY for any individual HAP, as a rolling, 12-month summation, and 24.7 TPY for any combination of HAPs, as a rolling, 12-month summation.

2. Substantive amounts of HAPs are emitted from the following non-insignificant emissions units:

   a. P001, P007, P008, and P009 (formaldehyde);
   b. P003 (xylene and toluene); and
   c. P021 (methanol).

   HAPs will also be emitted at negligible levels from the following insignificant emissions units:

   d. P022 (methanol);
   e. T043 (methanol);
   f. T044 (methanol); and
   g. N001 (metals, CDD/CDF, hydrochloric acid).

3. Beginning no later than January 1, 2005, the permittee shall use calculation methodologies to estimate HAP emissions for this facility. The following calculations shall be performed monthly:

   a. The HAP emissions from each of non-insignificant emissions units P001, P007, P008, and P009 shall be calculated as follows:

      lb product/day * lb HAP emitted/lb product (from the latest emissions test for the worst case product) * days of operation/month * ton/2000 lb = tons of HAP (formaldehyde)/month

      The HAP emission factor will be determined by source testing. Until the results of the formal source testing required by this permit are available, interim values from the most recent diagnostic testing shall be used.

   b. The HAP emissions from non-insignificant emissions unit P003 shall be calculated as follows:

      tons production/month * weight fraction of organic solvent in product * weight fraction of HAPs in solvent * 0.02 evaporative loss = tons of HAPs (xylene and toluene)/month

      The above calculation is based on US EPA publication AP-42, Section 6.4.1, Paint Manufacturing: "About 1 or 2 percent of the solvent is lost even under well-controlled conditions." DayGlo conservatively assumed the high end of this range - 2 percent evaporative loss.

c. The HAP emissions from non-insignificant emissions unit P021 shall be calculated as follows:

dye batches filtered/month * emission factor, lb methanol/batch * ton/2000 lb = tons of HAP (methanol)/month

The emission factor will be determined by source testing. Until the results of the source testing required by this permit are available, an interim emission factor of 74.5 lb/batch shall be used. This factor is based on diagnostic tests conducted in 1999 to determined Title V applicability.

d. The HAP emissions from bulk liquid storage of raw materials (insignificant emissions units P022, T043, and T044) shall be calculated using the latest version of the US EPA, TANKS program or equivalent calculations from US EPA publication AP-42, Chapter 7.

e. The HAPs emissions from insignificant emissions unit N001 shall be calculated as follows:

tons trash combusted/month * emission factor, lb HAP/ton trash = tons of HAP/month

The emission factor for each of the various HAPs (metals, CDD/CDF, and hydrochloric acid) shall be taken from US EPA publication AP-42, Table 2.1-9 (Refuse Combustion).

The permittee shall maintain records of all the above-mentioned monthly calculations.

4. Beginning no later than January 1, 2005, the permittee shall keep records for each month of the following information:

a. Diagnostic and compliance emission test data (including HAP emission factors) and the hours of operation for emissions units P001, P007, P008, and P009.

b. Production quantity, in pounds or tons, and batch records indicating solvent and HAPs contents for emissions unit P003.

c. Diagnostic and compliance emission test data (lb methanol/batch) and number of dye batches filtered for emissions unit P021.

d. The methanol throughput, in gallons, for emissions units P022, T043, and T044.

e. Quantity of trash combusted, in pounds or tons, for emissions unit N001.

5. Beginning no later than January 1, 2005, the permittee shall keep monthly records for the entire facility of the following information:

a. The total facility-wide emissions (and associated calculations) for each individual HAP, in pounds or tons per year (calculated by summing the individual HAP emission rates from all the emissions units at the facility).

b. The total facility-wide emissions (and associated calculations) for all combined HAPs, in pounds or tons per year (calculated by summing all the HAPs emission rates from all the emissions units at the facility).

c. The rolling 12-month summation of the total individual HAP emissions rates for each HAP from all the emissions units at the facility, in tons.

d. The rolling 12-month summation of the total combined HAPs emissions rates from all the emissions units at the facility, in tons.

6. Beginning no later than January 1, 2006, the permittee shall submit quarterly deviation (excursion) reports, in accordance with Part I of the General Terms and Conditions, Section A.I.c. of this permit, of the following information:

a. An identification of each month during which the rolling 12-month emissions rate (from the facility) for an individual HAP exceeded 9.7 tons, and the actual rolling, 12-month summation of each individual HAP emissions rate (from the facility) for each such month.

b. An identification of each month during which the rolling, 12-month emissions rate (from the facility) for combined HAPs exceeded 24.7 tons, and the actual rolling, 12-month summation of the combined HAPs emissions rates (from the facility) for each such month.

7. Beginning no later than January 31, 2006, the permittee shall submit annual reports that summarize the annual emissions of each individual HAP and the combined emissions of all the HAPs for the facility. These reports shall cover the previous calendar year and shall be submitted by January 31 of each year.

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

B001 - 1.46 MM Btu boiler
B002 - 1.46 MM Btu boiler
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 MM Btu Clayton boiler, Plant #7 (permit to install 13-1728)
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 cental vacuum system (permit to install 13-1067)
N001 - garbage incinerator (permit to install 13-066)
P004 - 600-gallon & 1600-gallon Plant #1 blend vessels with condenser/ OME or baghouse and carbon adsorber (permit to install 13-1581)
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 - R & D hoods, adm bld lab hoods (permit to install 13-1048)
T032 - 6,000 gallon acrylic resin tank (permit to install 13-1048)
T033 - 6,000 gallon ink vehicle (permit to install 13-1048)
T034 - 6,000 gallon ink oil T037 (permit to install 13-1048)
T035 - 6,000 gallon phthalate plastisizer (permit to install 13-1048)
T038 - 6,000 gallon ink vehicle T039
T039 - 6,000 gallon, 2-compartment ink oil tank T040
T040 - 6,000 gallon tung oil T041
T041 - 4,000 gallon linseed oil T042
T042 - 6,000 gallon ink vehicle T043
T043 - methanol UST
T044 - waste methanol UST
Z003 - Plant #1 alkyd kettle #1 controlled by a condenser
Z004 - Plant #1 planetary mixers & media mills
Z006 - Plant 2, 1.56 MM Btu Fulton boiler
Z008 - Plant #2 VC blender controlled by a rotoclone
Z009 - Plant #2 dye weighing room controlled by fabric filter
Z010 - Rotary drying dust collection system
Z011 - Plant #2 trash compactor controlled by cartridge filter
Z012 - Plant #2 pigment repack room controlled by cartridge filter
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, and well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

T044 - 10000-gallon Plant #6 waste methanol underground storage tank
Z013 - Plant #2 evaporative cooling tower
Z014 - Plant #7 evaporative cooling tower

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P001 (P001)
Activity Description: Plant #1 Base Kettles

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

2.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.

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.

2.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.

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 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 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 7 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.

III Monitoring and/or Record keeping

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 below, 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.

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.

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:

1a. 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).

1b. 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).

1c. 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions test for the worst case product]) / hours of operation = 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).

1d. 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions test for the worst case product]) = 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.

VI Miscellaneous Requirements

None

Emissions Unit: P001 (P001)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P002 (P002)
Activity Description: Plant #1Pilot Plant

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - manufacture of colorants: plant #1 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.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 2.13 lb/hr.
	OAC rule 3745-17-08(B)	See Section A.I.2.a below
	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.
	OAC rule 3745-17-07(B)(1)	Visible fugitive emissions of fugitive dust shall not exceed 20 percent opacity, as a three-minute average.

2. Additional Terms and Conditions

2.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:

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.

2.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.

2.c The PE from all equipment comprising this emissions unit shall be vented to the venturi scrubber.

2.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.

2.e The permittee shall employ the oven only to evaporate water from any solid materials.

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 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.

III Monitoring and/or Record keeping

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 below, 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.

Notwithstanding the frequency of reporting requirements specified below, 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.

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.

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 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.

VI Miscellaneous Requirements

None

Emissions Unit: P002 (P002)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P003 (P003)
Activity Description: Plant #1 Hi-Solv

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

2.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:

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.

2.b All the equipment comprising this emissions unit shall be vented to the wet scrubber.

2.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.

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.

III Monitoring and/or Record keeping

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.

Notwithstanding the frequency of reporting requirements specified below, 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 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 below, 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.

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.

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.

VI Miscellaneous Requirements

None

Emissions Unit: P003 (P003)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P007 (P007)
Activity Description: Plant #2 T-series Curing Ovens

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 1.2 lbs/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

2.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:

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.

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.

III Monitoring and/or Record keeping

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 below, 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.

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 below, 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.

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

   b. 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.

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:
   1.2 pounds 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions test for the worst case product]) / hours of operation = 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions testing for the worst case product]) = 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).

3. 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.

VI Miscellaneous Requirements

None

Emissions Unit: P007 (P007)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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.II.1.

2. Additional Terms and Conditions

2.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.

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.

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

Emissions Unit: P007 (P007)

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P008 (P008)
Activity Description: Plant #2 Kettle #1

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 1.5 lbs/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

2.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.

II Operational Restrictions

1. The pressure drop across the Tri-Mer Whir 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 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 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.

III Monitoring and/or Record keeping

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 below, 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.

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.

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:

Emissions Unit: P008 (P008)

a. Emission Limitation:
1.5 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions test for the worst case product]) / hours of operation = 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions testing for the worst case product]) = 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.

VI Miscellaneous Requirements

None

Emissions Unit: P008 (P008)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008: plant #2 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.	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

2.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.

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.

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

Emissions Unit: P008 (P008)

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P009 (P009)
Activity Description: Plant #2 Kettle #2

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009: plant #2 no. 2 kettle system for manufacturing thermoplastic/thermoset resin pigments, vented to a Tri-Mer Whirl 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 1.5 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

2.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.

Emissions Unit: P009 (P009)

II Operational Restrictions

1. The pressure drop across the Tri-Mer Whir 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 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 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.

III Monitoring and/or Record keeping

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 reciruclation 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 below, 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.

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.

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:
   1.5 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:

   (lbs product/day) (lb OC emitted/lb product [from the latest emissions test for the worst case product]) / hours of operation = 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:

(lbs product/day) (lb OC emitted/lb product [from the latest emissions testing for the worst case product]) = 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 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.

VI Miscellaneous Requirements

None

Emissions Unit: P009 (P009)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009: plant #2 no. 2 kettle system for manufacturing thermoplastic/thermoset resin pigments, vented to a Tri-Mer Whirl Wet dust collector and a packed tower scrubber, in series.	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

2.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.

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.

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

Emissions Unit: P009 (P009)

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P014 (P014)
Activity Description: Plant #2 PreGrind

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 2.7 lbs/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.
	OAC rule 3745-31-05 (A)(3) (PTI No. 13- 4233)	Particulate emissions (PE) from this emissions unit shall not exceed 11.83 tons per year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11 (B)(1) and 3745-17-07 (A)(1).

2. Additional Terms and Conditions

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

II Operational Restrictions

None

III Monitoring and/or Record keeping

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 below, 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.

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.

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:
2.7 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).

c. Emission Limitation:
11.83 tons PE per year

Applicable Compliance Method:
Compliance with the annual emission limitation listed in section A.I.1 shall be determined by multiplying the annual production rate by the company-supplied emission factor of 0.04 pound of PE per ton of production (4% loss of product at the grinder) and an estimated control efficiency for passive filtration as follows:

(tons production/year) X (0.04 lb of PE/ton production) X (1-0.98) X (0.0005) = tons PE/year.

VI Miscellaneous Requirements

None

Emissions Unit: P014 (P014)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

2.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.

i. 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.

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

Emissions Unit: P014 (P014)

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P015 (P015)
Activity Description: Plant #2 Fine Grind

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 2.9 lbs/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

2.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:

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.

2.b All of the equipment comprising this emissions unit shall be vented to the wet scrubber.

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.

III Monitoring and/or Record keeping

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.

Notwithstanding the frequency of reporting requirements specified below, 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.

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

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.

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:
2.9 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).

VI Miscellaneous Requirements

None

Emissions Unit: P015 (P015)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

2.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.

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.

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

Emissions Unit: P015 (P015)

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: P021 (P021)
Activity Description: Plant #7 Filter System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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)	0.551 lb 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**

2.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:

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.

2.b When dry materials are added to the rotary dryer, the rotary dryer 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 0.551 lb PE per hour.

2.c The OC emissions from all the equipment comprising this emissions unit shall be vented to the condenser.

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 when the emissions unit is in operation.

III Monitoring and/or Record keeping

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 below, 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.

   Notwithstanding the frequency of reporting requirements specified below, 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.

3. 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.

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.

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:
   0.551 lb/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.

3. 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.

Emissions Unit: P021 (P021)

VI Miscellaneous Requirements

None

Emissions Unit: P021 (P021)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Record keeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None