

Synthetic Minor Determination and/or Netting Determination

Permit To Install 16-02345

A. Source Description

Day-Glo Color Corporation of Cleveland, OH is applying for a Permit to Install (PTI) for the installation (in the Twinsburg plant located at 1570 E. Highland Road, Twinsburg, Summit County, OH) of a new 250 gallon capacity kettle reactor & cooling system (P005) with a wet scrubber system and a grinding system (P006) with a process control fabric filter to produce finely ground pigment colorant resins which are pneumatically conveyed to product silos and typically bagged into 50 pound bags for sale and shipment to other manufacturers for coloring plastics and coatings.

B. Facility Emissions and Attainment Status

Current facility air pollutant emissions include organic compounds (OCs), which primarily include formaldehyde, and particulate emissions (PE) from P001 (Pigment Reactor System); nitrogen oxides (NO_x) and carbon monoxide (CO) and other combustion product emissions from two (2) OAC rule 3745-31-03(A)(1)(a) exempt natural gas-fired heaters; and PE from three (3) other resin solid grinding/conveying operations, P002 through P004. Summit County is or will be non-attainment for applicable ozone ambient air standards.

C. Source Emissions

Unrestricted/uncontrolled potential OC emissions from P005, which primarily include formaldehyde, are 4.5 pounds/hour and 20 tons/year. The facility's application includes a request for a federally enforceable permit condition requiring the use of a packed-bed scrubber system to adequately control OC emissions from P005, thus ensuring the facility remains a Title V minor source of hazardous air pollutants (HAPs). The facility is a minor source of volatile OCs (VOCs), OCs, and combined HAPs. The permittee specifies actual OC emissions from P005, controlled by the packed-bed scrubber system described in the application, should not exceed 0.090 pound/hour & 0.40 ton/year, assuming an overall control efficiency of 98%.

D. Conclusion

With a federally enforceable requirement to use the packed-bed scrubber system, as described in the application, the facility should maintain Title V minor source status for all criteria and HAPs and avoid mandatory participation in the Title V program.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov.
Center

**RE: DRAFT PERMIT TO INSTALL
SUMMIT COUNTY**

CERTIFIED MAIL

Application No: 16-02345

DATE: 6/3/2004

Day Glo Color Corp Twinsburg Plant
Robert Mitchell
4515 St Clair Ave
Cleveland, OH 44103

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

The Ohio EPA is urging 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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

ARAQMD

Akron Metro Area Trans. Study

WV

PA

SUMMIT COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 16-02345 FOR AN AIR CONTAMINANT SOURCE FOR
DAY GLO COLOR CORP TWINSBURG PLANT**

On 6/3/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Day Glo Color Corp Twinsburg Plant**, located at **1570 E Highland Rd, Twinsburg, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 16-02345:

Pigment Kettle and Cooler, Grinding Blending and Bagging.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Lynn Malcolm, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308 [(330)375-2480]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 16-02345

Application Number: 16-02345
APS Premise Number: 1677130052
Permit Fee: **To be entered upon final issuance**
Name of Facility: Day Glo Color Corp Twinsburg Plant
Person to Contact: Robert Mitchell
Address: 4515 St Clair Ave
Cleveland, OH 44103

Location of proposed air contaminant source(s) [emissions unit(s)]:

**1570 E Highland Rd
Twinsburg, Ohio**

Description of proposed emissions unit(s):

Pigment Kettle and Cooler, Grinding Blending and Bagging.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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.)

3. 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.

4. 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.

5. 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).

6. 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.

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

Day Glo Color Corp Twinsburg Plant

Facility ID: 1677130052

PTI Application: 16-02345

Issued: To be entered upon final issuance

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. 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. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| PE | 4.2 |
| OCs | 0.99 |

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|---|
| <p>P005 (Pigment Kettle & Cooling System) manufacture of dry pigment colorant resin (used for coloring of plastics and coatings) in a kettle reactor (250 gallon capacity), then the resin product is cooled in tray coolers; air emissions of particulates (PE) and organic compounds (OCs) vented to pollution control devices comprised of a wet impingement scrubber (to remove air stream particulates) in series with a packed-bed scrubber to remove air stream organic compounds which are primarily formaldehyde, a hazardous air pollutant (HAP); application includes facility-requested federally enforceable Title V Synthetic Minor (TVSM) employment requirement of a packed-bed scrubber to maintain the facility's potential to emit below the applicable Title V emissions threshold of 10 tons/year of any individual HAP. The facility is a minor source of OCs, volatile OCs (VOCs), and combined HAPs.</p> | <p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-35-07(B)</p> <p>OAC rule 3745-17-07(A)</p> <p>OAC rule 3745-17-07(B)</p> <p>OAC rule 3745-17-08(B)</p> <p>OAC rule 3745-17-11(B)</p> <p>OAC rule 3745-21-07(G)</p> | <p>Stack emissions shall not exceed: 0.09 pound/hour & 0.43 ton/year of PE; 0.09 pound/hour & 0.43 ton/year of OC; and 10% opacity, as a 6-minute average.</p> <p>There shall be no visible particulate emissions from building ventilation.</p> <p>The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-35-07(B), and Part II, Sections A.2 and B.1 through B.3 below.</p> <p>See Part II, Section A.2.d below.</p> <p>The emissions control requirements of these rules are less stringent than the emissions control requirements established pursuant to OAC rule 3745-31-05(A)(3).</p> |

2. Additional Terms and Conditions

- 2.a The OC and PE emissions limits regulated per OAC rule 3745-31-05(A)(3) are based

Day G

PTI A

Emissions Unit ID: **P005**

Issued: To be entered upon final issuance

upon potential to emit for this emissions unit. Therefore, except for specific monitoring, record

Day G

PTI A

Emissions Unit ID: **P005**

Issued: To be entered upon final issuance

keeping, and reporting requirements to ensure the air pollution control equipment serving P005 is operating when P005 is operating, no other associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, the permittee shall apply for and, if required, obtain a final Permit to Install prior to equipment replacement or modification of equipment, production, and/or process materials that would increase the potential emissions of any air pollutant.

- 2.b** The pigment kettle shall be of an enclosed design and the pigment cooler trays shall include a hood or enclosure system of proper design, installation, and employment to effectively capture, contain, and vent OC emissions and PE to the air pollution control device(s) serving P005, while minimizing fugitive emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design and implementation.
- 2.c** The permittee shall properly install, adjust, operate, and maintain a wet impingement scrubber (or comparable air pollution control device), and associated control equipment (i.e., hoods, enclosures, ductwork, and fans, etc.), and any other equipment necessary to capture, contain, and vent PE from this emissions unit to the air pollution control device serving this emissions unit, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- 2.d** In order to maintain this facility as a Title V minor source of individual HAPs (i.e., below the Title V major size emissions threshold of 10 tons/year for any individual HAP) the permittee shall properly install, adjust, operate, and maintain a packed-bed scrubber and capture (collection) and vent system, with pollutant capture and control efficiencies equal or superior to the system described in the application, and any other equipment necessary, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), to capture, collect, and control air emissions of OCs (which include formaldehyde as the principal chemical constituent) from P005, to the extent possible with good engineering design and implementation, at or below the OC emissions limits specified above by OAC rule 3745-31-05(A)(3). This is a synthetic minor emissions unit condition and shall be a federally enforceable requirement.
- 2.e** The packed-bed scrubber serving P005 shall not need to use caustic addition to the scrubbing liquid (water) since formaldehyde is extremely water-soluble regardless of the scrubbing liquid pH. A high formaldehyde removal efficiency and limited secondary formaldehyde emissions from the scrubbing liquid shall be accomplished with a high makeup water rate to the scrubber and a high scrubber water recirculation flow rate, as specified in the application.

- 2.f Scrap process materials and resin product shall be properly disposed of. Spillage of process materials and/or resin product shall be promptly cleaned up to reduce the risk of fugitive dust emissions. Also, general housekeeping shall be performed, as needed, to minimize or eliminate emissions of fugitive dust.
- 2.g All raw and waste organic solvent materials shall be stored in closed containers with tightly fitted covers.
- 2.h The permittee requested the annual OC emissions limit of 0.99 ton/year in order to demonstrate compliance with Ohio's "Air Toxics Policy" without the need of air pollutant dispersion modeling.

B. Operational Restrictions

1. The wet impingement scrubber, packed-bed scrubber, capture (collection) system, and associated control equipment serving this emissions unit shall be employed all times the emissions unit is in operation.
2. The static pressure drop across the wet impingement scrubber and the static pressure drop across the packed-bed scrubber shall each be continuously maintained at a value of not less than 4 inches of water column when the emissions unit is in operation. The permittee may establish new static pressure drop ranges for the two wet scrubbers during emissions tests that demonstrate the emissions unit is in compliance with applicable requirements.
3. The wet impingement scrubber water recirculation flow rate shall be continuously maintained at a value of not less than 1.0 gallon per minute. The packed-bed scrubber water recirculation flow rate shall be continuously maintained at a value of not less than 15 gallons per minute. The permittee may establish new minimum water recirculation flow rates for the two wet scrubbers during emissions tests that demonstrate the emissions unit is in compliance with applicable requirements.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall document all times the wet impingement scrubber, packed-bed scrubber, capture (collection) system, and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation.
2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across each of the two scrubbers and the scrubber water recirculation flow rate for each of the two scrubbers. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

Day G

PTI A

Emissions Unit ID: **P005**

Issued: To be entered upon final issuance

3. During each day P005 is in operation, the permittee shall collect and record the following information:
 - a. the static pressure drop across each scrubber, in inches of water, on a once per shift basis;
 - b. the scrubber water recirculation flow rate for each scrubber, in gallons per minute, on a once per shift basis; and
 - c. a log or record of downtime(s) for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the air pollution control equipment serving this emissions unit. The presence or absence of any visible particulate emissions shall be noted daily in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in an 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 determined cause of the abnormal emissions if a cause can be determined upon investigation;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emission.

D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record in which the wet impingement scrubber, packed-bed scrubber, capture (collection) system, and/or associated control equipment serving this emissions unit were/was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate District Office or local air agency) that identify all periods of time during which the following scrubber parameters were not maintained above the required levels:
 - a. the pressure drop across each of the two scrubbers; and
 - b. the scrubber water recirculation flow rate for each of the two scrubbers.

Issued

Emissions Unit ID: P005

3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the scrubber static pressure drop and/or scrubber water recirculation flow rate monitoring devices and/or any recorders for either or both scrubbers was/were not in service. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
4. The permittee shall submit on a semi-annual basis a report which (a) identifies all days during which any abnormal visible particulate emissions were observed from the air pollution control equipment and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emissions limitations in Section A.1 of these special terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation: 10% opacity, as a 6-minute average (stack emissions)

Applicable Compliance Method: If required, compliance shall be determined by visible emission evaluations performed in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(1).

- b. Emissions Limitations: 0.09 pound/hour & 0.43 ton/year PE (stack emissions)

Applicable Compliance Method: The above PE limitations are greater than the controlled potential to emit from the stack, as established below:

$$H = PL(1 - (E * C));$$
$$Y = H(8760 \text{ hours/year})(1 \text{ ton}/2000 \text{ pounds});$$

Where,

$$H = 0.09 \text{ lb/hr of PE};$$
$$Y = 0.43 \text{ TPY of PE};$$
$$P = 330 \text{ lbs/hr [maximum production rate];}$$
$$L = 0.01 \text{ [estimated production loss fraction];}$$
$$E = 0.99 \text{ [estimated capture efficiency]; and}$$
$$C = 0.98 \text{ [wet impingement scrubber design control efficiency].}$$

Emissions Unit ID: **P005**

If required, emissions testing shall be performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 thru 5 and the procedures specified in OAC rule 3745-17-03(B).

- c. Emissions Limitations: 0.09 pound/hour & 0.4 ton/year OCs (stack & fugitive emissions)

Applicable Compliance Method: The above OC emissions limitations are greater than the controlled potential to emit, as established below:

$$S = UVTD(1 - (E*C));$$

$$F = UVTD(1 - E);$$

$$Y = H(8760 \text{ hours/year})(1 \text{ ton}/2000 \text{ pounds});$$

Where,

$$S = 0.09 \text{ lb/hr of OCs [hourly potential stack emissions];}$$

$$Y = 0.40 \text{ TPY of OCs [yearly potential stack emissions];}$$

$$U = 500 \text{ ppm [formaldehyde concentration of uncontrolled emissions];}$$

$$V = 2000 \text{ cu. ft./min. [air pollution control device air flow rate];}$$

$$T = 60 \text{ minutes/hour;}$$

$$D = 0.075 \text{ lb/cu.ft. [density of formaldehyde vapor at standard conditions];}$$

$$E = 0.99 \text{ [estimated capture efficiency]; and}$$

$$C = 0.99 \text{ [packed-bed scrubber design control efficiency].}$$

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

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. All of the terms and conditions of this permit for P005 are federally enforceable, except for terms F.1 of this permit.

Day G

PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|---|
| P006 (Pigment Grinding System) solid pigment resin product from the pigment cooler trays is delumped & coarsely ground into pigment hoppers, then finely ground by a jet mill & pneumatically conveyed to a silo/blender, finished pigment product bagged into 50 pound (typ.) bags for shipment; 1000 pounds/hour maximum production capacity; air emissions of particulates (PE) vented to and controlled by a fabric filter | OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-08(B) OAC rule 3745-17-11(B) | Stack emissions shall not exceed: 0.79 pound/hour & 3.5 tons/year of PE ; and 10% opacity, as a 6-minute average. There shall be no visible particulate emissions from building ventilation. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of Part II, Sections A.2 and B.1 below. The emissions control requirements of these rules are less stringent than the emissions control requirements established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The PE emissions limits regulated per OAC rule 3745-31-05(A)(3) are based upon potential to emit for this emissions unit. Therefore, except for specific monitoring, record keeping, and reporting requirements to ensure the air pollution control equipment serving P006 is operating when P006 is operating, no other associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, the permittee shall apply for and, if required, obtain a final Permit to Install

Day Glo Color Corp Twinsburg Plant

PTI A

Issued

Facility ID: 1677130052

Emissions Unit ID: **P006**

prior to equipment replacement or modification of equipment, production, and/or process materials that would increase the potential emissions of any air pollutant.

Day G

PTI A

Emissions Unit ID: **P006**

Issued: To be entered upon final issuance

- 2.b** The permittee shall properly install, adjust, operate, and maintain a fabric filter system (or comparable air pollution control device), and associated control equipment (i.e., hoods, enclosures, ductwork, and fans, etc.), and any other equipment necessary to capture, contain, and vent air emissions of particulates from this emissions unit to the air pollution control device serving this emissions unit, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.

- 2.c** Scrap process materials and resin product shall be properly disposed of. Spillage of process materials and/or resin product shall be promptly cleaned up to reduce the risk of fugitive dust emissions. Also, general housekeeping shall be performed, as needed, to minimize or eliminate emissions of fugitive dust.

B. Operational Restrictions

- 1. The fabric filter system and associated control equipment serving this emissions unit shall be employed all times the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall document all times the fabric filter system and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation.

- 2. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible particulate emissions from the fabric filter system(s) and/or associated control equipment serving this emissions unit. The presence or absence of any visible particulate emissions shall be noted daily in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in an 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 determined cause of the abnormal emissions if a cause can be determined upon investigation;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emission.

D. Reporting Requirements

- 1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record in which the fabric filter system(s) and/or associated control equipment

Day G

PTI A

Emissions Unit ID: **P006**

Issued: To be entered upon final issuance

serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

Day G

PTI A

Emissions Unit ID: **P006**

Issued: To be entered upon final issuance

2. The permittee shall submit on a semi-annual basis a report which (a) identifies all days during which any abnormal visible particulate emissions were observed from the fabric filter system and/or associated control equipment and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

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

- a. Emissions Limitation: 10% opacity, as a 6-minute average (stack emissions)

Applicable Compliance Method: If required, compliance shall be determined by visible emission evaluations performed in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(1).

- b. Emissions Limitations: 0.79 pound/hour & 3.5 tons/year PE (stack emissions)

Applicable Compliance Method: The above PE limitations the potential to emit from the stack, as established below:

$$H = PL(1 - (E * C));$$

$$Y = H(8760 \text{ hours/year})(1 \text{ ton}/2000 \text{ pounds});$$

Where,

$$H = 0.79 \text{ lb/hr of PE [hourly controlled potential emissions from the stack];}$$

$$Y = 1.8 \text{ TPY of PE [yearly controlled potential emissions from the stack];}$$

$$P = 1000 \text{ lbs/hr [maximum production rate];}$$

$$L = 0.04 \text{ [estimated production loss fraction];}$$

$$E = 0.99 \text{ [estimated capture efficiency]; and}$$

$$C = 0.99 \text{ [fabric filter design control efficiency].}$$

If required, emissions testing shall be performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 thru 5 and the procedures specified in OAC rule 3745-17-03(B)

F. Miscellaneous Requirements

Day Glo Color Corp Twinsburg Plant

PTI A

Issued

Facility ID: 1677130052

Emissions Unit ID: P006

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.