



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
ASHTABULA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-16412

DATE: 8/8/2002

Plasticolors, Inc
Edward Trenn
PO Box 816
Ashtabula, OH 44005-0816

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 8/8/2002
Effective Date: 8/8/2002**

FINAL PERMIT TO INSTALL 02-16412

Application Number: 02-16412
APS Premise Number: 0204010285
Permit Fee: **\$1200**
Name of Facility: Plasticolors, Inc
Person to Contact: Edward Trenn
Address: PO Box 816
Ashtabula, OH 44005-0816

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2600 Michigan Ave
Ashtabula, Ohio**

Description of proposed emissions unit(s):
High shear mixer no. 11.

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 Related to Monitoring and Recordkeeping 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

Plasticolors, Inc
PTI Application: 02-16412
Issued: 8/8/2002

Facility ID: 0204010285

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

Plasticolors, Inc
PTI Application: 02-16412
Issued: 8/8/2002

Facility ID: 0204010285

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

Plasticolors, Inc
 PTI Application: 02-16412
 Issued: 8/8/2002

Facility ID: 0204010285

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> |
|------------------|----------------------|
| OC | 10.9 |
| PE | 2.1 |

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> |
|--|--------------------------------------|--|
| P008 - High Shear Mixer No 11 (MX011) with a 99% efficient cartridge filter. Modification to PTI No 02-4169. | OAC rule 3745-31-05(A)(3) | Organic compounds (OC): 8 lbs/hr, 40 lbs/day, 5.2 tons/year See also Section A.2.a. |
| | | Particulate emissions (PE): 0.34 lb/hr, 8.2 lbs/day, 1.5 tons/year |
| | | Visible emissions: Shall not exceed 5% opacity as a 6-minute average. |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07 | The requirements of this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3). |
| | Ohio Air Toxics Policy | None. |

2. Additional Terms and Conditions

- 2.a Cleanup emissions from the use of styrene, or any other photochemically reactive material, as a cleaning agent is to be included with emissions from the mixing operations when determining compliance with the best available technology (BAT) limits.

B. Operational Restrictions

1. A dust control device with an efficiency of at least 99 percent shall be employed to control PE.

2. The pressure drop across the filter cartridge (DC007) shall be maintained between 3 to 10 inches of water while the production line is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each mix compound employed and each cleanup material employed;
 - b. an identification of whether or not each cleanup material is a photochemically reactive material;
 - c. the weight of each mix compound employed, in pounds;
 - d. the styrene content of each mix compound employed, in percent by weight;
 - e. the total amount of styrene employed, in pounds, for all mixes produced;
 - f. the actual number of hours that the emissions unit was in operation;
 - g. the volume, in gallons, of each photochemically reactive cleanup material applied;
 - h. the OC content of each photochemically reactive cleanup material applied, in pounds per gallon;
 - i. the OC emissions from each photochemically reactive cleanup material applied per cleanup event, using the following equation:

$$\text{OC (lbs/day)} = \text{Vol (gal)} \times \frac{\text{lbs OC}}{\text{gal}} \times \text{EF}$$

where:

$$\text{OC (lbs/day)} = \frac{\text{Total OC emissions from each photochemically reactive cleanup material applied}}{\text{Vol (gal)}}$$

$$\text{Vol (gal)} = \frac{\text{Total volume of photochemically reactive cleanup material applied}}{\text{Vol (gal)}}$$

The volume, in gallons, of each photochemically reactive cleanup material applied, as recorded per Section A.III.1.h.

lbs OC/gal = The OC content of each photochemically reactive cleanup material applied, in pounds per gallon, as recorded per Section C.1.h.

- j. The total OC emission rate for all cleanup events that day, calculated by the summation of the OC emission rates for each cleanup material applied, as performed in Section C.1.i;
 - k. The total OC emission rate for all mix compounds employed and all photochemically reactive cleanup materials applied, in pounds per day, calculated as required in Section E.2;
 - l. The average, hourly emission rate for all mix compounds employed and all photochemically reactive cleanup materials applied, in pounds per hour, calculated as required in Section E.1;
 - m. an identification of any time periods when the particulate control filter was not in service when the emissions unit was in operation; and
 - n. any observance of emissions from the dust collector stack (DC007).
2. The permittee shall properly install, operate and maintain equipment to monitor the pressure drop across the filter cartridge (DC007) while this emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a monthly basis.
 3. The permit-to-install (PTI) for this emissions unit (P008) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the PTI application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the PTI application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the maximum acceptable ground-level concentration (MAGLC). The following table summarizes the results of the modeling for the "worst case" pollutant:

| | |
|-------------------------------|--------------------------|
| Pollutant: | Styrene |
| Threshold Limit Value (TLV): | 86,300 ug/m ³ |
| Maximum Hourly Emission Rate: | 8.0 lbs/hr |

Predicted 1-Hour Maximum Ground-Level Concentration: 225.0 ug/m³

MAGLC = (TLV/42): 2,054.76 ug/m³

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the applying the "Air Toxic Policy" include the following:
- changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower TLV, as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing PTI will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final PTI prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the filter cartridge (DC007) did not comply with the allowable range specified above.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8.0 pounds per hour, and the actual hourly OC emissions for each such day;
 - b. an identification of each day during which the OC emissions from this emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day;
 - c. an identification of each day during which the average hourly PE from this emissions unit exceeded 0.34 pounds per hour, and the actual hourly PE for each such day;
 - d. an identification of each day during which the PE from this emissions unit exceeded 8.2 pounds per day, and the actual PE for each such day;
 - e. an identification of each day during which emissions from the dust collector stack (DC007) was observed.
2. The permittee shall notify the Ohio EPA, Northeast District Office (NEDO) in writing of any daily record showing that the particulate control filter was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to Ohio EPA, NEDO within 30 days after the event occurs.
3. The permittee shall submit annual reports which specify the total OC emissions and total PE from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.

E. Testing Requirements

1. Emissions Limitation:
OC: 8 pounds per hour

Applicable Compliance Method:
 Compliance shall be based on the following equation:

$$E \text{ (lbs OC/hr)} = \frac{(S \times E) + CL}{H}$$

where;

- E = Pounds of OC per hour.
- S = Amount of styrene, in pounds, as recorded in Section C.1.e.
- EF = Emission Factor of 0.002454 lb styrene per lb of styrene input. Emission factor derived from a stack test performed at P008 on May 23, 1997.
- H = The actual number of hours that the emissions unit was in operation, as recorded in Section C.1.f.
- CL = The total OC emission rate for all cleanup events using photochemically reactive materials, as calculated and recorded per Section C.1.j.

2. Emissions Limitation:
OC: 40 pounds per day

Applicable Compliance Method:
Compliance shall be based on the following equation:

$$E \text{ (lbs OC/day)} = (S \times E) + CL$$

where;

- E = Pounds of OC per day.
- S = Amount of styrene, in pounds, as recorded in Section C.1.e.
- EF = Emission Factor of 0.002454 lb styrene per lb of styrene input. Emission factor derived from a stack test performed at P008 on May 23, 1997.
- CL = The total OC emission rate for all cleanup events using photochemically reactive materials, as calculated and recorded per Section C.1.j.

3. Emissions Limitation:
OC: 5.2 tons per year

Applicable Compliance Method:
Compliance shall be based on the summation of each daily OC emission rate, as recorded in Section C.1.k, for each calendar year.

Plastic**PTI A****Issued: 8/8/2002**Emissions Unit ID: **P008**

4. Emissions Limitation:
PE: 0.34 pound per hour

Applicable Compliance Method:

Compliance shall be based on the following equation:

$$E \text{ (lbs PE/hr)} = \frac{(\text{SOL} \times \text{EF}) \times (1-\text{CE})}{H}$$

where;

E = Pounds of PE per hour.

SOL = Total amount of solids employed in mix(es), in pounds, as recorded in Section C.1.c.

EF = Emission Factor of 0.01. AP-42 6.4.1 (May 1983, reformatted January 1995) states PE amount to 0.5 to 1.0 percent of the pigment handled.

CE = Control efficiency of particulate control filter, reported to be 99% or 0.99.

H = The actual number of hours that the emissions unit was in operation, as recorded in Section C.1.f.

5. Emissions Limitation:
PE: 8.2 pounds per day

Applicable Compliance Method:
Compliance shall be based on the following equation:

$$E \text{ (lbs PE/day)} = (\text{SOL} \times \text{EF}) \times (1 - \text{CE})$$

where;

E = pounds of particulate per day

SOL = Total amount of solids employed in mix(es), in pounds, as recorded in Section C.1.c.

EF = Emission Factor of 0.01. AP-42 6.4.1 (May 1983, reformatted January 1995) states PE amount to 0.5 to 1.0 percent of the pigment handled.

CE = Control efficiency of particulate control filter, reported to be 99% or 0.99.

6. Emissions Limitation:
PE: 1.5 tons per year

Applicable Compliance Method:
Compliance shall be based on the summation of each daily PE rate, as calculated in Section E.5, for each calendar year.

7. Emissions Limitation:
Visible Emissions: 5% opacity as a 6-minute average

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).

Plasticolors, Inc
PTI Application: 02-16412
Issued

Facility ID: 0204010285

Emissions Unit ID: **P008**

F. Miscellaneous Requirements

1. The requirements of this PTI (02-16412) shall supercede the requirements for this emissions unit contained in PTI 02-4169 issued on December 21, 1988.

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> |
|---|--------------------------------------|--|
| P020 - Paddle Pot/Tank No 25 (MT025) with a 99% efficient cartridge filter. Modification to PTI No 02-8639. | OAC rule 3745-31-05(A)(3) | Organic compounds (OC): 8 lbs/hr, 31.2 lbs/day, 5.7 tons/year Particulate emissions (PE): 0.13 lb/hr, 3.1 lbs/day, 0.6 ton/year Visible emissions: Shall not exceed 5% opacity as a 6-minute average. |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07 | The requirements of this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3). |
| | Ohio Air Toxics Policy | None. |

2. **Additional Terms and Conditions**

- 2.a There shall not be any cleanup materials applied for this emissions unit, thus no emissions from cleanup.

B. Operational Restrictions

1. A dust control device with an efficiency of at least 99 percent shall be employed to control PE.
2. The pressure drop across the filter cartridge (DC007) shall be maintained between 3 to 10 inches of water while the production line is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each mix compound employed;
 - b. the weight of each mix compound employed, in pounds;
 - c. the styrene content of each mix compound employed, in percent by weight;
 - d. the total amount of styrene employed, in pounds, for all mixes produced;
 - e. the actual number of hours that the emissions unit was in operation;
 - f. The total OC emission rate for all mix compounds employed, in pounds per day, calculated as required in Section E.2;
 - g. The average, hourly emission rate for all mix compounds employed, in pounds per hour, calculated as required in Section E.1;
 - h. an identification of any time periods when the particulate control filter was not in service when the emissions unit was in operation; and
 - i. any observance of emissions from the dust collector stack (DC007).
2. The permittee shall properly install, operate and maintain equipment to monitor the pressure drop across the filter cartridge (DC007) while this emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a monthly basis.
3. The permit-to-install (PTI) for this emissions unit (P008) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions

unit's exhaust system, as specified by the permittee in the PTI application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the PTI application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the maximum acceptable ground-level concentration (MAGLC). The following table summarizes the results of the modeling for the "worst case" pollutant:

| | |
|--|----------------------------|
| Pollutant: | Styrene |
| Threshold Limit Value (TLV): | 86,300 ug/m ³ |
| Maximum Hourly Emission Rate: | 8.0 lbs/hr |
| Predicted 1-Hour Maximum Ground-Level Concentration: | 225.0 ug/m ³ |
| MAGLC = (TLV/42): | 2,054.76 ug/m ³ |

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower TLV, as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule

Plasticolors, Inc

PTI Application: 02-16412

Issued

Facility ID: 0204010285

Emissions Unit ID: **P020**

3745-31-01(VV)(1)(a)(ii), and a modification of the existing PTI will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final PTI prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the filter cartridge (DC007) did not comply with the allowable range specified above.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8.0 pounds per hour, and the actual hourly OC emissions for each such day;
 - b. an identification of each day during which the OC emissions from this emissions unit exceeded 31.2 pounds per day, and the actual OC emissions for each such day;
 - c. an identification of each day during which the average hourly PE from this emissions unit exceeded 0.13 pounds per hour, and the actual hourly PE for each such day;
 - d. an identification of each day during which the PE from this emissions unit exceeded 3.1 pounds per day, and the actual PE for each such day;
 - e. an identification of each day during which emissions from the dust collector stack (DC007) was observed.
3. The permittee shall notify the Ohio EPA, Northeast District Office (NEDO) in writing of any daily record showing that the particulate control filter was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to Ohio EPA, NEDO within 30 days after the event occurs.
4. The permittee shall submit annual reports which specify the total OC emissions and total PE from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.

E. Testing Requirements

1. Emissions Limitation:
OC: 8 pounds per hour

Applicable Compliance Method:

Plasticolors, Inc
PTI Application: 02-16412
Issued

Facility ID: 0204010285

Emissions Unit ID: **P020**

Compliance shall be based on the following equation:

$$E \text{ (lbs OC/hr)} = \frac{S \times EF}{H}$$

where;

E = Pounds of OC per hour

S = Amount of styrene, in pounds, as recorded in Section C.1.c.

EF = Emission Factor of 0.002454 lb styrene per lb of styrene input. Emission factor derived from a stack test performed at P008 on May 23, 1997.

H = The actual number of hours that the emissions unit was in operation, as recorded in Section C.1.e.

2. Emissions Limitation:

OC: 31.2 pounds per day

Applicable Compliance Method:

Compliance shall be based on the following equation:

$$E \text{ (lbs OC/day)} = S \times E$$

where;

E = Pounds of OC per day.

S = Amount of styrene, in pounds, as recorded in Section C.1.c.

EF = Emission Factor of 0.002454 lb styrene per lb of styrene input. Emission factor derived from a stack test performed at P008 on May 23, 1997.

3. Emissions Limitation:

OC: 5.7 tons per year

Applicable Compliance Method:

Compliance shall be based on the summation of each daily OC emission rate, as recorded in Section C.1.f, for each calendar year.

4. Emissions Limitation:

PE: 0.13 pound per hour

Applicable Compliance Method:

23

Plastic

PTI A

Issued: 8/8/2002

Emissions Unit ID: **P020**

Compliance shall be based on the following equation:

$$E \text{ (lbs PE/hr)} = \frac{(\text{SOL} \times \text{EF}) \times (1-\text{CE})}{\text{H}}$$

where;

E = Pounds of PE per hour.

SOL = Total amount of solids employed in mix(es), in pounds, as recorded in Section C.1.b.

EF = Emission Factor of 0.01. AP-42 6.4.1 (May 1983, reformatted January 1995) states PE amount to 0.5 to 1.0 percent of the pigment handled.

CE = Control efficiency of particulate control filter, reported to be 99% or 0.99.

H = The actual number of hours that the emissions unit was in operation, as recorded in Section C.1.f.

5. Emissions Limitation:

PE: 3.1 pounds per day

Applicable Compliance Method:

Compliance shall be based on the following equation:

$$E \text{ (lbs PE/day)} = (\text{SOL} \times \text{EF}) \times (1 - \text{CE})$$

where;

E = Pounds of particulate per day.

SOL = Total amount of solids employed in mix(es), in pounds, as recorded in Section C.1.b.

EF = Emission Factor of 0.01. AP-42 6.4.1 (May 1983, reformatted January 1995) states PE amount to 0.5 to 1.0 percent of the pigment handled.

CE = Control efficiency of particulate control filter, reported to be 99% or 0.99.

6. Emissions Limitation:

PE: 1.5 tons per year

Applicable Compliance Method:

Compliance shall be based on the summation of each daily PE rate, as calculated in Section E.5,

25

Plastic

PTI A

Issued: 8/8/2002

Emissions Unit ID: **P020**

for each calendar year.

7. Emissions Limitation:
Visible Emissions: 5% opacity as a 6-minute average

Plastic

PTI A

Issued: 8/8/2002

Emissions Unit ID: **P020**

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).

F. Miscellaneous Requirements

1. The requirements of this PTI (02-16412) shall supercede the requirements for this emissions unit contained in PTI 02-8639 issued on October 19, 1994.