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Facility Name: **PPG INDUSTRIES INC**

Application Number: **16-1798**

Date: **April 14, 1999**

**GENERAL PERMIT CONDITIONS**

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(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 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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio 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 Ohio Administrative Code

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(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 prove to be inadequate or cannot meet applicable standards.

#### PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

#### 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.

#### APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

#### 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.

#### PERMIT TO OPERATE APPLICATION

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A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

#### NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

#### SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for 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.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **PPG INDUSTRIES INC** located in **SUMMIT** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>
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P108 (Mod)	Teslin Line # 1 - mixer, blender, extruder, extractor, drying oven.
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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	
		See Additional Special Terms and Conditions.	3745-31-05 3745-17-07 3745-17-11 3745-21-07 (G) (2)	
		Compliance with Ohio EPA "Air Toxics Policy".		

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		stack P108-S01 <sup>2</sup> .		
	Permit Allowable Mass Emissions and/or Control/Usage Requirements	15.5 TPY particulate matter at stack P108-S01 <sup>2</sup> .		
	8 pounds/hour and 40 pounds/day, or reduce OC emissions by 90 percent; total allowable vent emissions from P110-S01 shall not exceed 1.1 pounds/hour or 5.0 TPY VOC. <sup>1</sup> Fugitive emissions from source P108 are limited to 33.55 TPY VOC.			
	5 percent opacity as a six-minute average at stack P108-S01.			
	3.53 pounds/hour particulate matter at			

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SUMMARY  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	35.04
PM	15.5

<sup>1</sup> Total allowable vent emissions from P110-S01 represent combined vent emissions from P108 and P110.

<sup>2</sup> Total allowable particulate emissions from P108-S01 are for material handling operations serving both Teslin lines, P108 and P110, and reflect the combined level of allowable emissions authorized in PTI numbers 16-506 and 16-1776.

**RECORD(S) RETENTION AND AVAILABILITY**

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

**REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Akron Air Pollution Control, 146 South High Street, Room 904, Akron, OH 44308.**

**WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and

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federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### **MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Akron Air Pollution Control, 146 South High Street, Room 904, Akron, OH 44308.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

#### **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.

#### **ADDITIONAL SPECIAL TERMS AND CONDITIONS**

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1. Maximum process weight rate for this emissions unit was developed based upon the current product mix. Prior to changing to a heavier dry material to be handled in this emissions unit, the permittee shall notify the Akron RAQMD and submit an application if a permit modification is required.
2. The mixer shall be adequately enclosed and shall vent to a fabric filter.
3. The calendar rolls and extruder shall be equipped with a Smog Hog or equivalent device to control any particulate emissions generated from plastic sheet formation.
4. The extruder, oil separator, drying oven, and TCE stripping unit shall be vented to a carbon adsorption unit to control organic emissions.

**A. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6 inches of water while the emissions unit is in operation.
2. The total mass steam flow rate from the carbon adsorber, for any carbon bed regeneration cycle, shall not be more than 10 percent below the minimum total mass steam flow rate for any regeneration cycle during the most recent emission test that demonstrated the emissions unit was in compliance.

**B. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the 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), and any modifications deemed necessary by the permittee. The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall operate and maintain a continuous monitor and recorder which measures and records the

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steam flow rate from the carbon adsorber serving P108. The monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, and any modifications deemed necessary by the permittee.

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

- a. the total mass steam flow rate from the carbon adsorber during each carbon bed regeneration cycle; and,
  - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit(s).
3. The permittee shall annually calculate the fugitive emissions from the emissions unit. These emissions shall be recorded and combined with the stack emissions to demonstrate compliance with OAC rule 3745-21-07(G) (2).

**C. Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that any day during which the pressure drop across the baghouse was less than 0.5 inch or more than 6 inches of water while the emissions unit was in operation.
2. The permittee shall submit total mass steam flow rate deviation (excursion) reports that identify all carbon bed regeneration cycles during which the total mass flow steam rates was more than 10 percent below the minimum total mass steam flow rate for any regeneration cycle during the most recent emissions test that demonstrated the emissions unit was in compliance.
3. The permittee shall submit required reports in the following manner:
  - a. reports of any required monitoring and/or recordkeeping information shall be submitted to

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the Akron Air Pollution Control Agency; and,

- 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 Akron Air Pollution Control 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.)
4. The permittee shall submit annual reports which contain the annual fugitive emissions and demonstrate that combined emissions did not exceed the allowable mass emission limitation in OAC rule 3745-21-07(G)(2). These reports shall be submitted by April 30, and will contain information from the previous calendar year.

**D. Testing Requirements**

1. 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 every 2.5 years;
  - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for organic compounds;

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- c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds, Method 18

of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; and,

- d. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron Air Pollution Control Agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron Air Pollution Control Agency. 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 Akron Air Pollution Control Agency's refusal to accept the results of the emission test(s).
  3. Personnel from the Akron Air Pollution Control Agency 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.
  4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron Air Pollution Control Agency 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 Akron Air Pollution Control Agency.

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5. Compliance with the emission limitation(s) in Permit to Install shall be 16-1776 determined in accordance with the following method(s):

a. Emission Limitation

1.1 lbs/hr OC (vent emissions from P110-S01 stack)  
5.0 TPY OC (vent emissions from P110-S01 stack)

Applicable Compliance Method

Compliance with the allowable mass emission rate for OC shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 18 and the procedures in OAC rule 3745-21-10(C).

b. Emission Limitation

5 percent opacity as a 6-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B) (1)

c. Emission Limitation

3.53 lbs/hr particulate matter (P108-S01 stack)  
15.5 TPY particulate matter (P108-S01 stack)

Applicable Compliance Method

If required, compliance shall be demonstrated through emissions testing in accordance with Method 5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation

8.0 lbs/hr OC and 40.0 lbs/day, unless reduced by 90 percent (combined stack and fugitive emissions)

Applicable Compliance Method

Stack Emissions: Compliance with the allowable mass emission rate for OC shall be determined

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in accordance with 40 CFR Part 60, Appendix A, Method 18 and the procedures in OAC rule 3745-21-10(C).

Fugitive Emissions: Compliance shall be demonstrated by an annual material balance calculation to determine fugitive losses.

**E. Miscellaneous Requirements**

1. This permit allows the use of wash solvents specified by the permittee in the application for PTI number 16-1798. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the organic compound emission limitation specified in this permit was established in accordance with the Ohio EPA's "Air Toxics Policy" and is based on both the wash solvent formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

**Pollutant: trichloroethylene**

**TLV (mg/m3): 269**

**Maximum Hourly Emission Rate (lbs/hr): 8.0**

**Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 147.5**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 6,404**

2. Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Akron Air Pollution Control Agency are required, including the possible issuance of modifications to PTI number 16-1798 and the operating permit:
  - a. any changes in the composition of the wash solvent, or the use of new wash solvents, that would result in the emission of a compound with a

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lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;
- c. any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01;
- d. any change in the composition of the wash solvent, or use of new wash solvents, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)]; and,
- e. any change in the composition of the wash solvent, or use of new wash solvents, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).