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Facility Name: **SHERWIN WILLIAMS- DIVERSIFIED BRANDS**

Application Number: **03-1405**

Date: **July 1, 1998**

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.

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PERMIT TO OPERATE APPLICATION

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 & 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 **Sherwin Williams - Diversified Brands** located in **Henry** 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>	<u>Quality Winding Line #2</u>
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P003 (mod)	Quality Winding Line #1	
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P005

Paint Brush
manufacturing
Process with
dust collection
systems

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		the Ohio Air Toxics Policy and terms and conditions of this permit		
	<u>BAT Determination</u>			<u>Applicable Federal & OAC Rules</u>
	Compliance with the Ohio Air Toxics Policy and terms and conditions of this permit			3745-21-09 (F)
				3745-31-05
		Use of non photochemically reactive materials (PRM's) and compliance with the terms and conditions of this permit		
	Compliance with			3745-21-09 (F)

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	07 (G)		and 9.6 TPY phenol**	
3745-31-05		Permit Allowable Mass Emissions and/or Control/Usage Requirements	Facility cleanup operations: 143 lbs VOC/month and 0.85 TPY VOC	
		2.9 lbs volatile organic compounds (VOC)/gallon coating, excluding water and exempt solvents	0.11 lbs particulate emissions (PE)/hour and 0.50 TPY PE	
		9.5 lbs volatile organic compounds (VOC)/hour and 44.0 TPY VOC*	0.03 lbs VOC/OC per hour and 0.13 tons VOC/OC per year	
3745-31-05		1.7 lbs phenol/hour and 9.6 TPY phenol**	Facility cleanup operations: 143 lbs VOC/month and 0.85 TPY VOC	

		2.9 lbs VOC/gallon coating, excluding water and exempt solvents	use of non-Photochemically Reactive Materials	
3745-17-11		9.5 lbs VOC/hour and 44.0 TPY VOC*		
3745-21-		1.7 lbs phenol/hour		

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SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
VOC/OC	44.98
PE	0.50
Phenol	9.6

- * The annual volatile organic compound emission limitation represents the combined emissions from both emission units P003, Quality Winding Line #1, and P004, Quality Winding Line #2, including emissions of phenol.
- ** The annual phenol emission limitation represents the combined emissions from both emission units P003, Quality winding Line #1, and P004, Quality Winding Line #2.
- *** Applicable particulate emission limitation established by OAC 3745-17-11 is less stringent than the Best Available Technology (BAT) requirement of 0.11 lb PE/hour and 0.50 ton PE/year, established by OAC 3745-31-05.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of

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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 **Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402.**

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

INTRODUCTION: Sherwin-Williams Diversified Brands, Inc. submitted permit to install (PTI) application 03-11405 for the modification of an existing Quality Winding Line #1, new installation of Quality Winding Line #2, and Paint Brush Manufacturing Process, Ohio EPA emissions units P003, P004, and P005 respectively. Modification of Quality Winding Line #1 resulted from a change in production rate of paint roller tubes from PTI number 03-9362. The annual phenol emissions limit for Quality Winding Lines #1 and #2 shall be combined in PTI number 03-11405 to allow for greater operational flexibility between the two emissions units. This Permit to Install shall also include an operational restriction to limit the facility's annual emissions of phenol below the major threshold limit of hazardous air pollutants (HAP) for Title V applicability. The annual

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potential emissions of VOC's from the paper and fabric adhesives employed in emissions units P003 and P004 are below the major threshold limit. The Paint Brush Manufacturing Process is equipped with five dust collection systems for the control of particulate emissions. VOC emissions from all cleanup operations for the facility shall be combined.

A. Applicable Emission Limitations and/or Control Requirements

1. In accordance with OAC Rule 3745-21-09(F), the adhesives employed in emissions units P003 and P004, Quality Winding Lines #1 and #2 respectively, shall not exceed a Volatile Organic Compound (VOC) content of 2.9 pounds per gallon, excluding water and exempt solvents.
2. The combined emission rate of phenol from emissions units P003 and P004 shall not exceed 2.2 pounds per hour and 9.6 tons per year.
3. The combined annual emission rate of VOC's (including phenol emissions) from emissions units P003 and P004 shall not exceed 44.0 tons per year.

B. Operational Restrictions

1. Quality Winding Line #1, emissions unit P003, and Quality Winding Line #2, emissions unit P004, shall not produce unwrapped paint roller tubes simultaneously.
2. Emissions unit P003 shall not employ more than 233 pounds of paper per hour and 2,041,080 pounds of paper per year.
3. Emissions unit P004 shall not employ more than 196 pound of paper per hour and 1,716,960 pounds of paper per year.
4. The emissions of phenol from emissions unit P003 and P004 shall not exceed 9.6 tons per year, based upon a rolling 12-month summation of the monthly emissions.
5. To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed

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the paper usage levels specified in the following table from emissions units P003 and P004:

<u>Month(s)</u>	<u>Maximum Allowable Paper Usage (pounds)</u>
1	939,150
1-2	1,195,740
1-3	1,451,970
1-4	1,708,200
1-5	1,964,430
1-6	2,220,660
1-7	2,476,890
1-8	2,733,120
1-9	2,989,350
1-10	3,245,580
1-11	3,501,810
1-12	3,758,040

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual paper usage limitation shall be based upon a rolling, 12-month summation of the monthly paper usage rates.

6. The dust collection systems shall be operating at all times while emissions unit P005, Paint Brush Manufacturing Process, is in operation. The permittee shall properly install, operate, and maintain dust collection systems for emissions unit P005 in accordance with the manufacturer's recommendations, instructions, and operating manuals.
7. The permittee shall employ only nonphotochemically reactive materials for emissions unit P005.
8. The hourly VOC emission limit for emission unit P005 is based on the emission unit's potential to emit. Therefore, no recordkeeping, deviation reporting, or compliance method calculations of the hourly emission limits are required to demonstrate compliance.
9. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 03-11405. In conjunction with the best

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available technology requirements of OAC rule 3745-31-05, the volatile organic compound emission limitations specified in this permit were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on both the coating and cleanup material 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 Industrial Source Complex Short-Term 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:

Volatile Organic Compounds

Pollutant: Phenol

TLV (ug/m3): 452.4

Maximum Hourly Emission Rate (lbs/hr): 2.2

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 93.5

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 452.4

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Ohio EPA, Northwest District Office Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 03-11405 and the operating permit:

- a. any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a 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

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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; and,
- d. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, 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)].

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information each day for emission units P003 and P004, Quality Winding Lines #1 and #2:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating (excluding water and exempt solvents) as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the number of hours each emission unit was in operation; and,
 - e. the VOC emission rate from all coatings employed, in pounds per hour.
- 2. The permittee shall collect and record the following information each day for emission units P003 and P004:
 - a. the name and identification of the paper employed;

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- b. the amount of each paper employed, in pounds;
 - c. the number of hours each emissions unit was in operation;
 - d. the phenol emissions rate from all paper employed in each emissions unit, in pounds per hour; and,
 - e. the combined emissions rate from all paper employed in both emission units P003 and P004, in pounds per hour.
3. The permittee shall record the following each month for P003 and P004:
 - a. the pounds of paper employed each month; and,
 - b. the rolling 12-month summation of pounds of paper employed.

Also, for the first 12 calendar months of operation, the cumulative pounds of paper used shall be recorded.

4. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions for the facility:
 - a. the name and identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material, in pounds per gallon;
 - d. the VOC emissions from all cleanup materials, in pounds; and,
 - e. the total VOC emissions from all coatings, paper, and cleanup materials, in tons.
5. These records shall be maintained in the company's files at the facility for a period of at least five years and shall be available for inspection, upon

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request, by personnel for the Ohio EPA.

D. Reporting Requirements

1. The permittee shall submit a quarterly report documenting any exceedance of the emissions limitations of this permit to the Ohio EPA Northwest District Office. For each exceedance, the permittee shall also provide the following additional information:
 - a. the cause of the excursion; and,
 - b. the action that has been taken and/or will be taken to correct the violation and prevent further occurrences.

The report shall be submitted by January 15, April 15, July 15, and October 15 and shall cover the previous 3 month period. If no exceedances occurred, a report stating that fact is still required. All reports are to be submitted to the Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, 43402. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month paper usage limitations of this permit to the Ohio EPA Northwest District Office. For each exceedance, the permittee shall also provide the following additional information:
 - a. the cause of the excursion; and,
 - b. the action that has been taken and/or will be taken to correct the violation and prevent further occurrences.

The report shall be submitted by January 15, April 15, July 15, and October 15 and shall cover the previous 3 month period. If no exceedances occurred, a report stating that fact is still required. All reports are to be submitted to the Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio,

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43402. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. The permittee shall submit an annual report for emissions units P003, P004, and P005 summarizing the information contained in the records specified in conditions (C)(1), (C)(2), and (C)(3) above. The reports shall also indicate the total phenol emissions and total volatile organic compound emissions (including emissions of phenol), in tons per year. The report shall be submitted to the Ohio EPA by January 30 of each year and shall cover the previous calendar year.

E. Testing Requirements/Compliance Method Requirements

1. Compliance with the emission limitations contained in this permit to install shall be determined in accordance with the following methods:

- a. Emission Limitation:
2.9 lbs volatile organic compounds (VOC)/gallon coating, excluding water and exempt solvents

Applicable Compliance Method:

Any determination of VOC content (VOC content means all the volatile organic compounds that are in a coating, and/or cleanup material expressed as pounds of VOC per gallon), solids content, or density or coating material shall be based on the coating materials as employed (as applied). The company shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as received by Reference Method 24. The Ohio EPA may require the company, if it used formulation data supplied by the manufacturer, to determine data used in the calculation of the VOC content of coating material by Reference Method 24 or equivalent or alternative Method

- b. Emission Limitation:

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9.5 lbs VOC/hour and 44.0 TPY VOC (including emissions of phenol)

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in Section (C)(1) and reporting requirements specified in Section (D)(2).

c. Emissions Limitation:

1.7 lbs phenol/hour, 2.2 lbs phenol/hour (combined emissions from P003 and P004) and 9.6 TPY phenol (combined emissions from P003 and P004)

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in Section (C)(2), reporting requirements specified in Section (D)(2), and calculated using the following equations:

$$\text{PAPER} = \text{sum from } 1 \text{ to } i \text{ of } (\text{TUBES}_i * \text{QPA}_i)$$

where:

PAPER = total paper used, in units of pounds/unit time

TUBES = total tubes produced, in units of tubes/time

QPA = quantity per assembly, in units of pounds /tube, including scrap; and

i = subscript to denote different types of tubes.

$$\text{PHENOL} = \text{PAPER} * \text{EF}$$

where:

PHENOL = phenol emissions in units of pounds phenol/hour

PAPER = amount of paper used, in units of pounds paper/hour; and,

EF = emissions factor supplied by the permittee, in units of pounds phenol/pounds paper.

unwrapped tubes, EF = 0.0055

wrapped tubes, EF = 0.002

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- d. Emission Limitation:
0.11 lbs particulate emissions (PE)/hour and 0.50
TPY PE

Applicable Compliance Method:
Compliance with the PM emissions shall be determined in accordance with the test method and procedures in Ohio Administrative Code (OAC) rule 3745-17-03(B) (10).

- 2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. the emission testing shall be conducted every three years after issuance of this permit;
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for phenol; and,
 - c. compliance with the allowable mass emission rate shall be demonstrated by use of a test method approved by the Ohio EPA prior to testing.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. 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 Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office 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

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characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

NOTE: No term or condition specifying a method for demonstrating compliance with any emission limitation or other requirement of this permit shall preclude the use by any person of any credible evidence to establish compliance with or a violation of this permit, the Clean Air Act, or any implementing regulations or rules promulgated thereunder.

F. Miscellaneous Requirements

The permittee must apply for a Draft FESOP in order to make these limitations on potential to emit Federally Enforceable, and therefore obtain minor status to avoid the Title V PTO requirement.