



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

9/1/2015

Certified Mail

Travis Cobb
 PPG - South Plant
 4829 Fairland Rd
 Barberton, OH 44203

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 1677020162
 Permit Number: P0114761
 Permit Type: Administrative Modification
 County: Summit

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

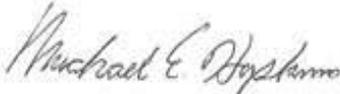
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
ARAQMD; Pennsylvania; West Virginia; Canada



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
PPG - South Plant**

Facility ID:	1677020162
Permit Number:	P0114761
Permit Type:	Administrative Modification
Issued:	9/1/2015
Effective:	9/1/2015



Division of Air Pollution Control
Permit-to-Install
for
PPG - South Plant

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. Federally Enforceable Standard Terms and Conditions	4
2. Severability Clause	4
3. General Requirements	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting	6
6. Compliance Requirements	6
7. Best Available Technology	7
8. Air Pollution Nuisance	8
9. Reporting Requirements	8
10. Applicability	8
11. Construction of New Sources(s) and Authorization to Install	8
12. Permit-To-Operate Application	9
13. Construction Compliance Certification	10
14. Public Disclosure	10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	10
16. Fees.....	10
17. Permit Transfers	10
18. Risk Management Plans	10
19. Title IV Provisions	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions	13
1. P099, CR-39 and CR-600 Plant	14



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date: 9/1/2015

Authorization

Facility ID: 1677020162
Facility Description: Chemical and Plastic Sheet Production
Application Number(s): M0002223
Permit Number: P0114761
Permit Description: Administrative modification of P0111313 to clarify certain descriptions and monitoring and/or record keeping requirements. CR-39 and CR-600 Plant consists of weigh tanks, reactor, wash kettle, washing/phasing, and other process vessels controlled with a scrubber.
Permit Type: Administrative Modification
Permit Fee: \$250.00
Issue Date: 9/1/2015
Effective Date: 9/1/2015

This document constitutes issuance to:

PPG - South Plant
PPG Industries, Inc.
4829 Fairland Road
Barberton, OH 44203-3913

of a Permit-to-Install for the emissions unit(s) identified on the following page.

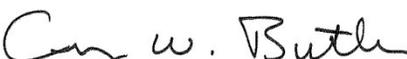
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
1867 West Market St.
Akron, OH 44313
(330)375-2480

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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


Craig W. Butler
Director



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date:9/1/2015

Authorization (continued)

Permit Number: P0114761
Permit Description: Administrative modification of P0111313 to clarify certain descriptions and monitoring and/or record keeping requirements. CR-39 and CR-600 Plant consists of weigh tanks, reactor, wash kettle, washing/phasing, and other process vessels controlled with a scrubber.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P099
Company Equipment ID:	CR-39 Plant
Superseded Permit Number:	P0111313
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date:9/1/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Akron Regional Air Quality Management District.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Akron Regional Air Quality Management District. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Akron Regional Air Quality Management District every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Akron Regional Air Quality Management District in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Akron Regional Air Quality Management District concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Akron Regional Air Quality Management District.
- 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 state-only required 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 Regional Air Quality Management District. 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, 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.)

10. 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) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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 permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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 operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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 by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

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



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date:9/1/2015

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date:9/1/2015

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. The emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
3. This facility is subject to 40 CFR Part 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing.

The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.



Final Permit-to-Install
PPG - South Plant
Permit Number: P0114761
Facility ID: 1677020162
Effective Date:9/1/2015

C. Emissions Unit Terms and Conditions

1. P099, CR-39 and CR-600 Plant

Operations, Property and/or Equipment Description:

CR-39 and CR-600 Plant - weigh tanks, reactor, wash kettle, washing/phasing, and other process vessels controlled with a scrubber – modification to increase production capacity

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	<p>Volatile organic compound (VOC) emissions from the process vents shall not exceed 5.39 pounds per batch and 14.28 tons per year.</p> <p>Fugitive emissions of VOC shall not exceed 16.0 tons per year.</p>
b.	OAC rule 3745-21-07(M)(2)	Exempt from control requirements per OAC rule 3745-21-07(A)(3) due to applicability of OAC rule 3745-21-14.
c.	OAC rule 3745-21-14(C)(3)(b)	Exempt from control requirements provided aggregate uncontrolled total annual mass emissions less than 30,000 pounds of VOC from the process vents of the batch process train.
d.	40 CFR Part 63, Subpart FFFF (applicable only during production of CR-600)	See sections (2)a.-(2)c., d)(4), e)(4), and f)(3).
e.	40 CFR 63.1-15 (applicable only during production of CR-600)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.

(2) Additional Terms and Conditions

- a. Pursuant to 40 CFR 63.2435 the requirements of 40 CFR Part 63, Subpart FFFF do not apply to this emissions unit during the production of CR-39 since CR-39 production does not process, use or generate any of the organic HAP listed in section 112(b) of the Clean Air Act or hydrogen halide or halogen HAP.
- b. Pursuant to 40 CFR 63.2445(d), if any Group 2 emission point becomes a Group 1 emissions point, the permittee must comply with the Group 1 monitoring and record keeping requirements for the emission point beginning on the date the switch occurs.
- c. Pursuant to 40 CFR 63.1019(b), equipment in service less than 300 hours per calendar year is excluded from the requirements of 40 CFR 63.1025 through 40 CFR 63.1036 if it is identified as required in 40 CFR 63.1022(b)(5).

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to the wet scrubber at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water), and the scrubber liquid flow rate (in gallons per minute during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid flow rate on a once per shift basis, and the daily average values for each of the 3 shift readings (or 1 or 2 shift readings on days when the emissions unit was operated for only 1 or 2 shifts). The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
 - a. The acceptable pressure drop across the scrubber, that shall be less than or equal to 6 inches of water, based upon an average value of all 3 shift readings for each day.
 - b. The acceptable scrubber liquid flow rate shall not be less than 3.0 gallons per minute, based upon an average value of all 3 shift readings for each day.

Whenever the monitored value for any parameter deviates from the range(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;

- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop and flow rate readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

These ranges for the pressure drop and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable OC emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

- (2) The permittee shall maintain monthly records that identify the following:
 - a. The date(s) and time(s) for all periods of CR-39 production
 - b. The date(s) and time(s) for all periods of CR 600 production
- (3) The permittee shall comply with the applicable monitoring/record keeping requirements of 40 CFR 63, Subparts FFFF, SS, and UU including but not limited to the following during all periods of CR 600 production:
 - a. The permittee shall monitor and record the pressure drop across the scrubber and the scrubber liquid flow rate according to the applicable provisions of 40 CFR 63.996 and 93.998 whenever this emissions unit is in operation.

- b. For MON storage tanks - At time of permit issuance all MON storage tanks are considered Group 2, and there are no monitoring or record keeping requirements for Group 2 storage tanks.
 - c. For MON transfer racks - At time of permit issuance all MON transfer racks are considered Group 2, and there are no monitoring requirements for Group 2 transfer racks. The permittee shall record annually the rack-weighted average partial pressure for all transfer racks that meet the definition as provided in 40 CFR 63.2550.
 - d. For MON wastewater streams - All MON process wastewater streams are considered Group 2, and there are no monitoring requirements for Group 3 wastewater streams. The permittee shall record annually the Group 2 status of the wastewater streams.
 - e. For equipment leaks - The permittee shall comply with 40 CFR 63, Subpart UU in order to demonstrate compliance with 40 CFR 63.2480 of 40 CFR, Subpart FFFF as described in the MON LDAR plan.
 - f. Pursuant to 40 CFR 63.2445(d), if any Group 2 emission point becomes a Group 1 emissions point, the permittee must comply with the Group 1 monitoring and record keeping requirements for the emission point beginning on the date the switch occurs.
- (4) The permittee shall maintain records of the uncontrolled total annual mass emissions for the batch process train and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with OAC rule 3745-21-14(F), and the potential or permitted number of batch cycles per year, or in the alternative, total production of the process train.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber or the liquid flow rate was outside of the appropriate range contained in this permit;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
 - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;

- d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop or liquid flow rate into the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (3) The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (4) The permittee shall comply with the applicable notification and reporting requirements of 40 CFR 63, Subpart FFFF, including but not limited to the following:
- a. The pre-compliance, notification of compliance status (NOCS), and semiannual compliance reports specified in Table 11 or 40 CFR 63, Subpart FFFF as referenced by 40 CFR 63.2520.
 - b. Notification of Process Change - In accordance with 40 CFR 63.2520(e)(10)(ii)(C), the permittee shall submit a notification 60 days before the scheduled implementation date of change from Group 2 to Group 1 for any emissions point. The notification shall include the information specified in 40 CFR 63.2520(e)(10)(i).
 - c. Notification of Compliance Status (NOCS) Report - In accordance with 40 CFR 63.2445(d) and 63.2450(g)(5), if any Group 2 emission point becomes a Group 1 emissions point, results of all initial compliance demonstrations must be included in an NOCS. The NOCS must be submitted within 150 days after the switch occurs. The NOCS shall contain the applicable information specified in 40 CFR 63.2520(d).
 - d. In accordance with 40 CFR 63.2445(d), if any Group 2 emission point becomes a Group 1 emission point, the permittee shall comply with Group 1 reporting requirements for the emission point beginning on the date the switch occurs.
- (5) The permittee shall notify the director in writing if the uncontrolled total annual mass emissions from the batch process train exceed 30,000 pounds of VOC, within sixty days after the event occurs. Such notification shall include a copy of all records of the event.
- (6) The permittee shall submit an initial compliance report, within sixty calendar days after the compliance dates specified in OAC rule 3745-21-14(J), containing the information specified in OAC rule 3745-21-14(I)(2).
- (7) The permittee shall submit a semiannual compliance status reports no later than sixty calendar days after the end of each six-month period. The first report shall be submitted no later than eight months after the date the initial compliance report is due and shall cover the six-month period prior beginning on the date the initial status report is due. The reports shall contain the information specified in OAC rule 3745-21-14(I)(3).

- (8) The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing that the batch process train is subject to OAC rule 3745-21-14. The notification, which shall be submitted not later than sixty days after the effective date of this rule, shall provide the information specified in OAC rule 3745-21-14(K)(5).

f) Testing Requirements

- (1) Compliance with the emission limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 5.39 pounds per batch and 14.28 tons per year.

Applicable Compliance Method:

Compliance with the batch emission limitation shall be demonstrated based on the results of emission testing in accordance with the requirements specified in section f)(2) below.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

b. Emission Limitation:

Fugitive emissions of VOC shall not exceed 16.0 tons per year.

Applicable Compliance Method:

The annual fugitive emission limitation was developed by using the emission factors contained in USEPA's "Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017, November 1995).

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after the permit modification occurs.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for VOC.
- c. The following test method(s) shall be employed to demonstrate compliance with the control efficiency:

Methods 1 through 4, and 18 or 25, as appropriate, of 40 CFR Part 60, Appendix A.

Each test run shall last for the entire duration of a batch production cycle.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- 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 appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - f. During each test run, the permittee shall monitor and record both the pressure drop across the scrubber and the scrubber liquid flow rate every 15 minutes and include the results in the test report.
 - g. Personnel from the appropriate Ohio EPA District Office or local air 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.
 - h. 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 appropriate Ohio EPA District Office or local air 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 appropriate Ohio EPA District Office or local air agency.
- (3) The permittee shall comply with the applicable testing requirements of 40 CFR 63, Subpart FFFF, including but not limited to the following requirements associated with changes from Group 2 to Group 1 status:
- a. Initial compliance demonstration – In accordance with 40 CFR 63.2445(d), if any Group 2 emission point becomes a Group 1 emission point, the permittee shall conduct an initial compliance demonstration as specified in 40 CFR 63.2450(g)(5) within 150 days after the switch occurs.

- b. In accordance with 40 CFR 63.2445(d), if any Group 2 emission point becomes Group 1, the permittee shall comply with Group 1 testing requirements for the emission point beginning on the date the switch occurs.

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions units’ listed above maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified Permit to Install (PTI) 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 toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.