



08/28/2026

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT

Facility Name: ALTIVIA Petrochemicals, LLC
Facility ID: 0773000080
Permit Type: Renewal
Permit Number: P0091334

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Ohio EPA document search website here: [*eDocument Search / Ohio Environmental Protection Agency*](#). If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3611 by the end of the 45-day review period if you wish to object to the proposed permit.

Sincerely,

A handwritten signature in black ink that reads "Robert Hodanbosi".

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: Portsmouth City Health Dept., Air Pollution Unit

PROPOSED

Division of Air Pollution Control Title V Permit for ALTIVIA Petrochemicals, LLC

Facility ID:	0773000080
Permit Number:	P0091334
Permit Type:	Renewal
Issued:	08/28/2026
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Title V Permit
for
ALTIVIA Petrochemicals, LLC

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Authorization

Facility ID:	0773000080
Facility Description:	Chemical Process Plant
Application Number(s):	A0022709, A0022710, A0022711, A0022712, A0022713, A0022714, A0022715, M0000380, A0037602, A0041857, A0043298, A0044597, A0048806, A0064322, A0067568, A0068028, A0082275
Permit Number:	P0091334
Permit Description:	Title V renewal for chemical manufacturing facility
Permit Type:	Renewal
Issue Date:	
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0091333

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

ALTIVIA Petrochemicals, LLC
1019 Haverhill-Ohio Furnace Road
Haverhill, OH 45636-0127

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

Portsmouth City Health Dept., Air Pollution Unit
605 Washington St.
3rd Floor
Portsmouth, OH 45662
(740)353-5156

The above-named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Portsmouth City Health Dept., Air Pollution Unit. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date. This permit is granted subject to the conditions attached hereto.

John Logue
Director, Ohio Environmental Protection Agency

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM ₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	PM _{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m ³ = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH ₄ = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO ₂ = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m ³ = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH ₃ = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO ₂ = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO _x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO ₂ = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H ₂ S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m ³ = micrograms per cubic meter

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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting for State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30., Submitting Documents Required by this Permit
- [Authority for term: ORC 3704.036(A)]*

2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.
- [Authority for term: OAC rule 3745-77-07(A)(3)(b)(i)]*
- 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 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.
- [Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii)]*
- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with



Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenance requests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Portsmouth City Health Dept., Air Pollution Unit. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.



If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.20, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

[Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b)]

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)(v)]

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Portsmouth City Health Dept., Air Pollution Unit unless otherwise specified.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

3. Reporting of Any Exceedance of a Federally Enforceable Emission Limitation or Control Requirement Resulting from Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

[Authority for term: OAC rule 3745-77-07(A)(4)]

5. 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.

[Authority for term: OAC rule 3745-77-07(A)(5)]

6. Severability Clause

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.

[Authority for term: OAC rule 3745-77-07(A)(6)]

7. 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 reissuance, or modification, or for denial of a permit renewal application.
- 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. 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, reopening 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.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

[Authority for term: OAC rule 3745-77-01, OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77-07(A)(7)]

8. 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.

[Authority for term: OAC rule 3745-77-07(A)(8)]

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

[Authority for term: OAC rule 3745-77-07(A)(9)]

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

[Authority for term: OAC rule 3745-77-07(A)(10)]

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

[Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D)]

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the state, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under state law only.

[Authority for term: OAC rule 3745-77-07(B)]

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.
 - (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 Portsmouth City Health Dept., Air Pollution Unit 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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Portsmouth City Health Dept., Air Pollution Unit) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.
 - b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d)(2)a. above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d)(2)a. above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

[Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L)]

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

[Authority for term: OAC rule 3745-77-07(F)]

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [defined as "Title I modification" in OAC rule 3745-77-01], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days' notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

[Authority for term: OAC rules 3745-77-07(H)(1) and (2)]

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Authority for term: OAC rule 3745-77-07(G)]

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as "insignificant activities and emissions levels" as defined in OAC rule 3745-77-01. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

[Authority for term: OAC rule 3745-77-07(I)]

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

[This term is provided for informational purposes only.]

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

[Authority for term: OAC rule 3745-77-07(A)(1)]

20. Permit-to-Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit-to-install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-07(A)(1)]

21. 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.

[Authority for term: OAC rule 3745-77-07(A)(1)]

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible 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 Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-01]

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

[Authority for term: OAC rule 3745-77-01(H)(11)]

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

25. Records Retention Requirements Under State Law Only

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.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable state air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

[Authority for term: OAC rule 3745-77-07(C)]

27. Scheduled Maintenance/Malfunction Reporting for State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Portsmouth City Health Dept., Air Pollution Unit in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Portsmouth City Health Dept., Air Pollution Unit must be notified in writing of any transfer of this permit.

[Authority for term: OAC rule 3745-77-01(C)]

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) Where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) Where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

- c) Where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

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 Portsmouth City Health Dept., Air Pollution Unit, 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

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. Facility-Wide Leak Detection and Repair Programs:

- a) The following emission 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0129566 issued 06/29/2026)	Volatile organic compound (VOC) emissions from facility-wide equipment leaks shall not exceed 187 tons per year. Acetone emissions from facility-wide equipment leaks shall not exceed 80 tons per year. Ammonia emissions from facility-wide equipment leaks shall not exceed 193 tons per year. See b)(2)(a) thru (c).
b.	40 CFR Part 63, Subpart A (40 CFR 63.01 – 63.16)	See b)(2)(d).
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to fugitive equipment leaks associated with the chemical manufacturing process units.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart H. See b)(2)(e) through b)(2)(i).



d.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [In accordance with 63.160(a), the provisions of this subpart apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed-vent systems required by this subpart that are intended to operate in organic service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63.	Except as otherwise provided, the permittee shall establish a hazardous air pollutant (HAP) leak detection and repair program for the affected sources, in compliance with the operational restrictions, monitoring, record keeping and reporting requirements of 40 CFR 63.162 through 63.182 and 63.184. See b)(2)(e) through b)(2)(i).
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(2) Additional Terms and Conditions

- a. Modifications of the equipment at this facility, shall not require a PTI pursuant to OAC Chapter 3745-31 that result solely in increases in fugitive equipment leaks unless and until the calculated facility-wide potential to emit (PTE) for fugitive emissions equal or exceeds the appropriate facility-wide allowable fugitive emission limit in B.2.a) above.
- b. The permittee shall consider only those fugitive emissions from the equipment being installed or modified (i.e., not the facility-wide fugitive emission limit) when determining applicability under OAC rule 3745-31-11 through OAC rule 3745-31-20.
- c. The permittee shall maintain a leak detection and repair (LDAR) program for equipment (pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system) in volatile organic compound (VOC) service at the facility. The LDAR program shall be maintained in accordance with the requirements specified in 40 CFR Part 63, Subpart H.
- d. For specific equipment which are subject to the provisions of 40 CFR Part 60, Subpart VV and/or VVa, and also subject to 40 CFR Part 63, Subpart H, the permittee is required to only comply with 40 CFR Part 63, Subpart H. The provisions in 40 CFR 63.1(a)(3) of Subpart A do not alter the provisions in this section.
- e. For equipment in VOC service which are subject to 40 CFR Part 60, Subpart VV and/or VVa, but are not subject to 40 CFR Part 63, Subpart H, the permittee has elected to apply 40 CFR Part 63, Subpart H to all such equipment, in accordance with 40 63.160(c) of Subpart H. All VOC in equipment shall be considered, for purposes of applicability and compliance with 40 CFR Part 63, Subpart H, as if it were organic HAP. Compliance with the provisions of 40 CFR Part 63, Subpart H, in the manner described in this section, shall be deemed to constitute compliance with 40 CFR Part 60, Subpart VV.



- f. For equipment in VOC service which are subject to OAC rule 3745-21-09(DD), the permittee shall maintain an LDAR program for equipment in VOC service. Consistent with U.S. EPA streamlining policy, the permittee has elected to demonstrate compliance with OAC rule 3745-21-09(DD) by demonstrating compliance with the equipment leak standards in 40 CFR Part 63, Subpart H and considering all VOC as if it were organic HAP. The requirements in 40 CFR Part 63, Subpart H are generally more stringent than the LDAR requirements of OAC rule 3745-21-09(DD).
- g. The following emission units are subject to 40 CFR Part 63, Subpart H: J004, J006, J008, P001, P006, P007, P008, P009, P012, P013, T023, T024, T025, T026, T033, T029, T030, T034, T039, T045, T046, T059, T063, T064, and T065.
- h. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F, G and H.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F, G and H.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.
- i. Due to HON rule (40 CFR Part 63, Subparts F, G, and H) revisions by U.S. EPA in 2020, 2021, and 2024, some of the requirements for compliance with these subparts within this permit have changed. For some of these rule revisions, the date for achieving compliance is in the future, which for existing sources is July 15, 2027. The facility shall be responsible for demonstrating compliance with 40 CFR Part 63, Subparts F, G, and H, as these rules exist at the time during which compliance is being demonstrated, including new compliance requirements which are scheduled to take effect on July 15, 2027, unless otherwise approved by the Director of the Ohio EPA or his representative. Should 40 CFR Part 63, subparts F, G, and H be further revised by U.S.EPA in the future, the permittee shall be responsible for demonstrating compliance with 40 CFR Part 63, Subparts F, G, and H, as these rules exist at the time during which compliance is being demonstrated.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 63, Subpart H, NATIONAL EMISSION STANDARDS FOR ORGANIC HAZARDOUS AIR POLLUTANTS FOR EQUIPMENT LEAKS, including the following sections:

63.162(c)	identifying affected equipment
63.162(d)	vacuum service exemption
63.162(f)	identifying leaking equipment
63.162(h)	failure to repair leaks



63.163(a), (b)(2), (c) and (d)	detecting pump leaks
63.163(e), (f), (g), (i) and (j)	exemption from detecting pump leaks
63.164(a) through (c) and (e)(2) through (i)	compressor seal barrier fluid system requirements
63.164(h) and (i)	exemption from compressor seal barrier fluid system requirements
63.165(a) and (b)(1) For each source as defined in 63.101 and each source as defined in 63.191, beginning no later than July 15, 2027, section 63.165(a) no longer applies. On or after July 15, 2027, comply with 63.165(e) instead. On or after July 15, 2027, comply with paragraph (b)(1) except as provided in 63.165(e).	pressure relief device instrument reading requirements
63.165(c) and (d) For each source as defined in 63.101 and each source as defined in 63.191, beginning no later than July 15, 2027, comply with 165(c) and (d), except as provided in 63.165(e).	exemption from pressure relief device instrument reading requirements
63.165(e)(1) and (e)(2) On or before July 15, 2027, comply with the requirements of 63.165(e)(1) and (e)(2) for each pressure relief device in organic HAP gas or vapor service.	operating requirements and pressure release requirements
63.165(e)(3), (e)(6), (e)(7), and (e)(8) On or before July 15, 2027, comply with the requirements of 63.165(e)(3), (e)(6), (e)(7), and (e)(8) for all pressure relief devices in organic HAP service.	pressure release management; root cause analysis and corrective action analysis; corrective action implementation; and flowing pilot-operated pressure relief devices.
63.165(e)(4) and (e)(5) On or before July 15, 2027, comply with the requirements of 63.165(e)(3), (e)(6), (e)(7), and (e)(8) for all pressure relief devices in organic HAP service.	requirements for pressure relief devices routed to a control device, process, fuel gas system, or drain system; pressure relief devices exempted from pressure release management requirements.
63.166(a) through (c)	sampling connection system requirements
63.167(a)(1) through (e)	open-ended valves or lines requirements
63.168(b)(2), (f)(1), (f)(2) and (g)	determining monitoring intervals, leak detection and repair requirements for

	valves in gas/vapor service and in light liquid service
63.168(h) and (i)	exemption from requirements for valves in gas/vapor service and in light liquid service
63.169(b) through (c)	determining monitoring intervals, leak detection and repair requirements for pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service
63.170	requirements for surge control vessels and bottoms receivers.
63.171(a) through (e)	delay of repair requirements
63.172(a) through (d) and (h) through (n)	requirements for closed-vent systems and control devices
63.173(a)(2) through (j)	determining monitoring intervals, leak detection and repair requirements for agitators in gas/vapor service and in light liquid service
63.174(a)(2) through (j)	determining monitoring intervals, leak detection and repair requirements for connectors in gas/vapor service and in light liquid service
Table 1 to Subpart H of Part 63	batch process monitoring frequency
Table 2 to Subpart H of Part 63	vapor pressure limitations for surge control vessels and bottoms receivers

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Record keeping

- (1) The permittee shall comply with the applicable monitoring and record keeping for fugitive equipment leaks required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart H, NATIONAL EMISSION STANDARDS FOR ORGANIC HAZARDOUS AIR POLLUTANTS FOR EQUIPMENT LEAKS, including the following sections:

63.163(b)(1), (b)(3), (d)(2) and (e) through (j)	monitoring requirements for leaks in light liquid service pump
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63.164(d) and (e)(1)	monitoring requirements for compressor seal barrier fluid systems
63.165(b)(2) Comply with paragraph (b)(2) except as provided in 63.165(e).	monitoring requirements for pressure relief device
63.165(e)(2), (3), (e)(6), (e)(7), and (e)(8) On or before July 15, 2027, comply with the requirements of 63.165(e)(2), (e)(3), (e)(6), (e)(7), and (e)(8) for all pressure relief devices in organic HAP service.	pressure release requirements; pressure release management; root cause analysis and corrective action analysis; corrective action implementation; and flowing pilot-operated pressure relief devices.
63.168(b), (d), (h) and (i)	monitoring requirements for valves in gas/vapor service and in light liquid service
63.169(a)	monitoring requirements for pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service
63.172(f), (g), (k) and (l)	monitoring requirements for closed-vent systems
63.173(a)(1) and (d)(4)	monitoring requirements for agitators in gas/vapor service and in light liquid service
63.174(a)(1)	monitoring requirements for connectors in gas/vapor service and in light liquid service
63.175(a) through (e)	quality improvement program for valves
63.176(a) through (d)	quality improvement program for pumps
63.177(a) through (e), 63.178(a) through (d) and 63.179	alternative means of emission limitation
63.180(a) through (d), (f) and (g)	test procedures for monitoring (Method 21 of 30 CFR Part 60, Appendix A
63.181(a)	conditions for establishing compliance utilizing one record keeping system for multiple emissions units
63.181(b)(1) and (2)	requirement to identify (list) subject equipment
63.181(b)(11)	Recordkeeping requirements for the work practice standards specified in 63.165(e)
63.181(c)	documentation of visual inspections
63.181(d)	documentation of leaks
63.181(f)	requirements for recording compressor compliance tests and monitoring following



	a pressure release for each pressure relief device
63.181(g)	requirements for closed-vent systems and control devices
63.181(h)	requirements for quality improvement programs
63.181(i)	requirements for equipment in heavy liquid service
63.181(j)	requirement to identify (list) equipment in organic HAP service less than 300 hours per year
63.181(k)	requirements for alternative means of emission limitation of 63.179
63.184	fenceline monitoring provisions

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d).

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (2) By April 15 of each year, the permittee shall submit a report to the Portsmouth Local Air Agency that specifies the VOC, acetone, and ammonia emissions from the facility-wide fugitive equipment during the previous calendar year. Each report shall also include the calculations for the VOC, acetone, and ammonia emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(d)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit semiannual, quarterly, and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart H, NATIONAL EMISSION STANDARDS FOR ORGANIC HAZARDOUS AIR POLLUTANTS FOR EQUIPMENT LEAKS, per the following sections:

63.182(d)	descriptions of the summary information required in periodic reports
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63.182(e)	requirements for quarterly fenceline monitoring system reports
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitation in section B.2.a). of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

VOC emissions from facility-wide fugitive equipment leaks shall not exceed 187 tons per year.

Acetone emissions from facility-wide fugitive equipment leaks shall not exceed 80 tons per year.

Ammonia emissions from facility-wide equipment leaks shall not exceed 193 tons per year.

Applicable Compliance Method:

The facility-wide PTE fugitive emissions shall be calculated using the following methodology:

The facility-wide PTE fugitive emissions are based upon the sum of PTE fugitive emissions from components in each emissions unit at the facility. These components include all valves, pumps, pressure relief valves, connectors, open-ended lines, and sampling connections in regulated service at the facility. PTE fugitive emissions are calculated using the facility component count, component service type, and PTE fugitive emission factors.

PTE fugitive emission factors are calculated utilizing synthetic organic chemical manufacturing industry (SOCMI) Screening Ranges Emission Factors and SOCMI Average Emission Factors as listed in U.S. EPA's "Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017). The service type for each component is determined according to the definitions contained in the SOCMI NESHAP (40 CFR Part 63, Subpart H) for gas, light liquid, and heavy liquid service. For the purposes of regulatory overlap (applicability and compliance) with 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(DD), all VOC in such equipment at the facility is considered as if it were organic HAP.

The PTE fugitive emission factors for monitored components in light liquid and gas/vapor service are calculated using the SOCMI Screening Ranges Emission Factors and "potential to emit" leak rates. A leak rate of 0.5% for pumps in light liquid service and a leak rate of 0.1% for all other monitored components in light liquid and gas/vapor service is used to calculate "potential to emit" leak rates. PTE fugitive emission factors are then calculated for each component type based on the SOCMI Screening Ranges Emission Factors and the "potential to emit" leak rates using the following equation:

PTE Fugitive Emission Factor = PTE Leak Rate * (>10,000 ppm Screening Ranges Emission Factor) + (1- PTE Leak Rate) * (<10,000 ppm Screening Ranges Emission Factor)

This same methodology is used to calculate the PTE fugitive emission factors for all components in heavy liquid service using a “potential to emit” leak rate of 0.1%. The PTE fugitive emission factors for unmonitored components in light liquid and gas/vapor service (i.e. components in acetone or ammonia service that are not required to be monitored by applicable regulations) are set equal to the SOCMI Average Emission Factors. The table below lists the SOCMI Screening Ranges and Average Emissions Factors, the leak rate (if any), and the resulting PTE fugitive emission factor for each component type.

The PTE fugitive emissions can be calculated by multiplying all the components in a given service type by the respective PTE fugitive emission factor as listed in the table below. The summation of emissions from all components in each service type is the facility-wide PTE fugitive emissions.

	Service Component	Screening Concentrations 10,000 ppm lb/hr	Screening Concentrations <10,000 ppm lb/hr	Assumed % of components Leaking for Year (%)	Facility PTE Emission Factor Set Lb/hr
Monitored Gas/Vapor and Light Liquid Components	<u>Gas/Vapor</u>				
	Valves	0.172	0.000289	0.1	0.000461
	Compressor Seals	3.545	0.197	0.1	0.2003
	Pressure Relief Valves	3.728	0.0985	0.1	0.1021
	Connectors (Flanges)	0.249	0.00018	0.1	0.000429
		0.0264	0.0033	0.1	0.00332
	Open-Ended Lines	-	-	Default Average Factor to	0.0331
	Sampling Connections	0.197	0.000364	0.1	0.000561
				0.5	0.00676
	<u>Light Liquid</u>	0.536	0.0041	0.1	0.00676
	Valves	0.249	0.00018	0.1	0.000429
	Pump Seals/Agitator Seals	0.02635	0.0033	0.1	0.00332
		-	-	Default Average Factor to	0.0331
	Connectors (Flanges)	-	-		
	Open-Ended Lines				
	Sampling Connections				

Unmonitored Heavy Liquid Components	<u>Heavy Liquid</u>				
	Valves	0.00051	0.00051	0.1	0.00051
	Pump Seals	0.476	0.0046	0.1	0.00507
	Connectors/Flange	0.249	0.00018	0.1	0.000429
	s Open-Ended Lines	0.02635	0.0033	0.1	0.00332
	Sampling Connections	-	-	Default Average Factor to	0.0331
		Facility PTE Emission Factor Set equal to SOCMI Average Emission Factors lb/hr			
Unmonitored Light Liquid and Gas/Vapor Components	<u>Gas/Vapor</u>				
	Valves	0.0132			
	Compressor Seals	0.503			
	Pressure Relief Valves	0.229			
	Connectors (Flanges)	0.00403			
	Open-Ended Lines	0.0037			
	Sampling Connections	0.0331			
		0.00888			
	<u>Light Liquid</u>	0.0439			
	Valves	0.00403			
	Pump Seals/Agitator Seals	0.0037			
	Connectors (Flanges)	0.0331			
	Open-Ended Lines				
	Sampling Connections				

[Authority for term: OAC rule 3745-31-05 and 3745-77-07(A)(1)]

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and F, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry: J004, J006, J008, P001, P006, P007, P008, P009, P012, P013, T023, T024, T025, T026, T029, T030, T033, T034, T039, T045, T046, T059, T063, T064, and T065. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and G, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater: J004, J006, J008, P001, P006, P007, P008, P009, P012, P013, T023, T024, T025, T026, T029, T030, T033, T034, T039, T045, T046, T059, T063, T064, and T065. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

5. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks: J004, J006, J008, P001, P006, P007, P008, P009, P012, P013, T023, T024, T025, T026, T029, T030, T033, T034, T039, T045, T046, T059, T063, T064, and T065. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

6. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and DDDDD, National Emission Standards for Hazardous Air Pollutants (NESHAP) from Industrial, Commercial, and Institutional Boilers and Process Heaters: B020. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

7. The following emissions units contained in this permit are subject to 40 CFR Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations: P001, P007, P009, and P013. The complete NESHAP requirements, including the NESHAP General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 61)

8. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart NNN, Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (NSPS): P007, P012, and P013.

Due to rule revisions by U.S. EPA in 2024, some of the requirements for compliance with this subpart have changed. The facility shall be responsible for demonstrating compliance with 40 CFR Part 60, Subpart NNN, as these rules exist at the time during which compliance is being demonstrated, unless otherwise approved by the Director of the Ohio EPA or his representative. Should 40 CFR Part 60, Subpart NNN be further revised by U.S.EPA in the future, the permittee shall be responsible for demonstrating compliance as these rules exist

at the time during which compliance is being demonstrated. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gov> or by contacting the Portsmouth Local Air Agency.

(Authority for term: 40 CFR Part 60)

9. The following emissions unit contained in this permit are subject to 40 CFR Part 60, Subpart III, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes (NSPS): P001, P012. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gov> or by contacting the Portsmouth Local Air Agency.

(Authority for term: 40 CFR Part 60)

10. The following emissions unit contained in this permit are subject to 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984 (NSPS): T029, T030, T059, and T063. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gov> or by contacting the Portsmouth Local Air Agency.

(Authority for term: 40 CFR Part 60)

11. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units(NSPS): B020. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gov> or by contacting the Portsmouth Local Air Agency.

(Authority for term: 40 CFR Part 60)

12. The following emissions unit contained in this permit are subject to 40 CFR Part 60, Subpart VV and/or VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (NSPS): P001, P006, P007, P008, P009, P012, and P013. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gov> or by contacting the Portsmouth Local Air Agency.

(Authority for term: 40 CFR Part 60)

13. Nitrogen Oxides (NO_x) Budget Program

a) OAC Chapter 3745-14

The emissions units identified below are non-electric utility generating unit (non-EGU) NO_x budget units as defined in OAC Chapter 3745-14-01(C)(1)(b)(iii)(a). The Clean Air Interstate Rule (CAIR) adopted by Ohio in OAC Chapter 3745-109 has been vacated and replaced by the federal Cross State Air Pollution Rule (CSAPR), effective January 1, 2015. Only EGU sources are subject to the CSAPR requirements. There is no longer a trading program for non-EGUs. OAC Chapter 3745-14 provisions that outline the mechanisms and requirements for emission allocations, deduction, transfer, and/or surrender of allowances are obsolete. Complete NO_x Budget Program rules may be assessed via the internet from the Ohio EPA website https://epa.ohio.gov/dapc/regs/3745_14 or by contacting the Portsmouth Local Air Agency.

Emissions unit B020 – Natural Gas Fired Boiler

- b) Alternative Monitoring and Reporting to the Nitrogen Oxides (NO_x) Budget Program OAC 3745-14-08(H)

The permittee shall comply with the alternative NO_x monitoring and reporting provisions of OAC Chapter 3745-14-08(H) by monitoring and reporting in accordance with 40 CFR Part 60 during the Ozone season control period (May 1 through September 30).

(Authority for term: OAC rules 3745-77-07(A)(5), and 3745-14)

- (1) The permittee shall comply with OAC 3745-14 using an approved alternative monitoring method in accordance with OAC 3745-14-08(H)(1) by using monitoring and reporting in accordance with 40 CFR Part 60. See the NO_x monitoring and recordkeeping requirements in Section C. of this permit for emissions unit B020 pertaining to the NO_x CEMS.
- (2) During periods of missing or inaccurate data for the periods required to be collected and maintained above during the Ozone season control period, the following procedures for data substitution shall be utilized for the NO_x CEMS data:
 - a. for the NO_x CEMS Data, the permittee shall use the arithmetic average of all valid data points for the month;
 - b. for the annual heat content, the permittee shall use the prior year information provided by the natural gas supplier; and
 - c. for the daily fuel usage, the permittee shall estimate the fuel usage based on all available process data (e.g. steam production and operating hours). Alternatively, the permittee may use the maximum heat input capacity of emissions unit B020, 267.65 MMBtu/hour, as the default substitution value for any periods of missing or inaccurate data.

(Authority for term: OAC rules 3745-14-08(H) and 3745-77(C)(1))

c) Reporting

- (1) The permittee shall report actual NO_x emissions, in tons, as determined using the approved alternative monitoring procedures, for the previous control period in the annual fee emissions report.

(Authority for term: OAC rule 3745-14-08(H)(8))

14. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit to install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and/or 40 CFR Part 60 or 63:

- a. B021 – 99 mmBtu/hr boiler – PBR issued 9/19/24;
- b. J001 – east barge loading – PTI 07-00451;
- c. J003 – west barge loading – 40 CFR Part 63, Subparts F, G, and H.
- d. J010 – Phenol intermediate truck loading – PTI 00591;
- e. J012 – AMS intermediate truck/railcar loading – PTI 07-00593;
- f. P019 - 375 HP emergency generator (213-L, Phenol 2) - PBR issued 7/23/2019;
- g. P020 - 375 HP emergency generator (2002-L, Phenol 1) –PBR issued 7/23/2019;
- h. P021 – 830 HP emergency generator (4202-L, Phenol 3) – PBR issued 7/23/2019.
- i. P022 – 365 HP Diesel Fire Water Pump (2302-J, General Plant) – PBR issued 7/23/2019;

- j. P023 - 460 HP Diesel Fire Water Pump (2302-J, General Plant) – PBR issued 7/23/2019;
- k. P024 – 430 HP distillate oil fired emergency firewater pump (2302-JBE) – PBR issued 7/23/2019 ;
- l. T035 – AMS storage tank – PTI 07-00451;
- m. T049 – AMS storage tank – PTI 07-00451;
- n. T060 – scrubbing liquid storage – PTI 07-00232; and
- o. T062 – North storm water surge tank – PTI 07-00264

[Authority for term: OAC rule 3745-77-07(A)(13)]

15. Pursuant to 40 CFR Part 64, the permittee provided a Compliance Assurance Monitoring (CAM) applicability analysis with the June 30, 2009 Title V renewal application and an updated CAM analysis on January 14, 2021. The permittee determined the emissions units at the facility subject to CAM are the following emissions units which vent to the regenerative thermal oxidizer (RTO) (2550-L) or the catalytic oxidizer (4320-L): P001, P007, P009, and P012. However, in accordance with 64.2(b)(1)(i), the requirements of Part 64 do not apply to emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. Each of the oxidizers identified above is subject to the Hazardous Organic NESHAP (HON) requirements found in 40 CFR Part 63, Subparts F, G, and H.

[Authority for term: 40 CFR Part 64]

C. Emissions Unit Terms and Conditions

1. B020, 2001-UG

Operations, Property and/or Equipment Description:

267.65 mmBtu/hr natural gas fired boiler (2001-UG) equipped with low NO_x burner and flue gas recirculation with O₂ Trim

- 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 operation(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 are identified below. 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) and OAC rule 3745-31-05(A)(3) (PTI P0130603 issued 10/07/2021)	Install a boiler equipped with low NO _x burners and flue gas recirculation designed to achieve NO _x emissions of 0.0336 lb NO _x / mmBtu heat input. Install a boiler equipped with proper burner design and good combustion practices to achieve CO emissions of 0.073 lb CO / mmBtu heat input.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, VOC, and SO ₂ emissions from this air contaminant source since the potential to emit for each pollutant is less than 10 tons per year.
c.	40 CFR Part 60 Subpart Db (40 CFR 60.40b to 60.49b) In accordance with 40 CFR 60.40b and 60.41b, this emissions unit is a steam generating unit subject to the Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units, constructed after 6/19/84.	NO _x emissions shall not exceed 0.20 pound per mmBtu of actual heat input. See b)(2)a and b)(2)b.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack may exceed 20% opacity, as a 6-minute average, for no more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.
d.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input.
e.	OAC rule 3745-110-03(D)	See b)(2)f.
f.	40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575) [In accordance 40 CFR 63.7500(c), this emissions unit is a limited-use boiler subject to the tune-up requirements specified in this section.]	Tune-up requirements specified in Table 3. [40 CFR 63.7540] See b)(2)c.
g.	40 CFR 63.1 – 63.16 (40 CFR 63.7565)	Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

- a. The NO_x standards under 40 CFR Part 60.44b shall apply at all times including periods of startup, shutdown and malfunction.
- b. Compliance with the NO_x emission limitation established pursuant to 40 CFR Part 60, Subpart Db shall be determined on a rolling, 30-day basis.

This emission limitation is less stringent than the emission limitation specified pursuant to ORC 3704.03(T) and OAC rule 3745-31-05(A)(3).
- c. The permittee shall comply with the applicable work practice standards required under 40 CFR Part 63, Subpart DDDDD for boiler 2001-UG:
 - i. This emissions unit is identified as a unit designed to burn gas 1 subcategory boiler and is not subject to the emission limits in Tables 1 and 2 or 11-13 of the subpart, the operating limits in Table 4 of the subpart.



The gas 1 subcategory boiler equipped with O₂ trim is subject to the once every five years tune-up requirements conducted in accordance with 40 CFR 63.7510(e) and 40 CFR 63.7515(d) and Table 3 to the subpart. The initial tune-up must be completed no later than 180 days after startup of boiler 2001-UG and each subsequent tune-up must be completed no more than 61 months after the previous tune-up. In accordance with section 63.7540(a)(12), you may delay the burner inspection specified in paragraph 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

- d. Each continuous NO_x monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. At least 45 days before commencing certification testing of the continuous NO_x monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NO_x emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a log dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60 and to conduct relative accuracy test audits, in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- e. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data recording/processing hardware and software.
- f. The emission limitation specified by this rule is less stringent than the emission limitation specified pursuant to ORC 3704.03(T) and OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas as fuel in boiler 2001-UG (emissions unit B020).
[Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(A)(1)]
- (2) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including the following sections:

63.7500(a)(1)	work practice standards in Table 3, #3 and #4
63.7500(a)(3)	boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions
63.7510(e)	conduct an initial tune-up of the boiler or process heater
63.7540(a)(10)	conduct a tune-up of the boiler or process heater to demonstrate continuous compliance once every 5 years
63.7540(a)(12)	If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set

	the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.
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[Authority for term: 40 CFR Part 63, Subpart DDDDD and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in boiler 2001-UG (emissions unit B020).

[Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1)]

- (2) The permittee shall collect and record the natural gas usage for this emissions unit for each calendar month, in million cubic feet.

[Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1)]

- (3) Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

[Authority for term: 40 CFR Part 60, Subpart Db and 3745-77-07(C)(1)]

- (4) The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to:

- a. calendar date;
- b. emissions of nitrogen oxides in pounds per mmBtu actual heat input on an hourly average basis;
- c. emissions of nitrogen oxides in pounds per mmBtu actual heat input on a rolling, 30-day basis;
- d. identification of all days where the rolling, 30-day average NO_x emissions rate exceeds the pound per mmBtu emission limitation, the reason for the excess emissions and a description of the corrective actions taken;
- e. identification of operating days for which sufficient NO_x emissions data has not been obtained, the reason for not obtaining sufficient data, and a description of the corrective actions taken;
- f. identification of all periods of time which emissions data has been excluded from the calculation of the average emission rate and the reason for excluding the data;
- g. a record of the "F" factor used in the calculation of the rolling, 30-day average NO_x emission rate and the method used to determine the "F" factor;
- h. identification of the times when NO_x concentration exceeded the span of the continuous monitoring system;



- i. description of any modifications to the CEMS that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3 of 40 CFR Part 60, Appendix B;
- j. results of daily CEMS drift tests and quarterly accuracy assessments as required by Procedure 1 of 40 CFR Part 60, Appendix F;
- k. results of daily zero/span calibration checks and magnitude of manual calibration adjustments;
- l. hours of operation of the emissions unit, continuous NO_x monitoring system;
- m. the date, time, and hours of operation of the emissions unit without the continuous NO_x monitoring system;
- n. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous NO_x monitoring system; and
- o. the reason (if known) and the corrective actions taken (if any) for each such event in (m) and (n).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

See 40 CFR 60.48b(b) through 60.48b(j).

[Authority for term: 40 CFR Part 60, Subpart Db and 3745-77-07(C)(1)]

- (5) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart DDDDD— National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including the following sections:

63.7515(d)	Applicable work practice standard / performance tune-up requirements
63.7540(a)(12)	Records of tune-up information/results
63.7555	Required record keeping
63.7560	Record retention

[Authority for term: 40 CFR Part 63, Subpart DDDDD and 3745-77-07(C)(1)]

- (6) The permittee shall comply with OAC rule 3745-14 using an approved alternative monitoring method in accordance with OAC 3745-14-08(H)(1) by using monitoring and reporting in accordance with 40 CFR Part 60.

[Authority for term: 40 CFR Part 60, Subpart Db, OAC rule 3745-14-08(H), and 3745-77-07(C)(1)]

- (7) The permittee shall collect and maintain records of the following information for this emissions unit during the Ozone season control period (see NO_x Budget Program requirements in Section B.4.):
- a. the daily natural gas usage volume, in MMscf;
 - b. the monthly natural gas usage volume, in MMscf (a summation of the daily gas usage recorded in “a” for the calendar month);



c. a copy of the supplier's annual or monthly, as applicable, fuel analysis for the higher heating value (HHV) of the natural gas; and

d. the monthly NO_x emissions, in tons per month, calculated in accordance with the following equation:

$$\text{NO}_x, \text{ tons/month} = [\text{total monthly natural gas usage (MMscf)} \times \text{natural gas HHV (MMBtu/scf)} \times \text{Monthly Averaged CEMS Data (lb/MMBtu)}] / 2000 \text{ (lbs/ton)}$$

Noting that the Monthly Average CEMS Data is the average of hourly data collected under d)(4)b. above for each calendar month.

[Authority for term: OAC rules 3745-14-08(H) and 3745-77-07(C)(1)]

(8) During periods of missing or inaccurate data for the records required to be collected and maintained in d)(7) above during the Ozone season control period, the following procedures for data substitution shall be utilized:

a. for the NO_x CEMS Data, the permittee shall use the arithmetic average of all valid data points for the month;

b. for the annual heat content, the permittee shall use the prior year information provided by the natural gas supplier; and

c. for the daily fuel usage, the permittee shall estimate the fuel usage based on all available process data (e.g. steam production and operating hours). Alternatively, the permittee may use the maximum heat input capacity of emissions unit B020, 267.65 MMBtu/hour, as the default substitution value for any periods of missing or inaccurate data.

[Authority for term: 40 CFR Part 60, Subpart Db and 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in boiler 2001-UG (emissions unit B020). Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23 and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall include the following:

i. the facility name and address;

- ii. the manufacturer and model number of the continuous NO_x and other associated monitors;
- iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total NO_x emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

See 40 CFR 60.49b(a) through 60.49b(w).

[Authority for term: 40 CFR Part 60, Subpart Db and 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart DDDDD— National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including the following sections:



63.7545(e)	Notification of Compliance Status for the initial compliance demonstration of each boiler or process heater, including all performance test results and fuel analyses
63.7545(f)	Notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption
63.7550	Required reporting
63.7555	Required records
63.7560	Record retention

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit an annual report of the actual Ozone season NO_x emissions, in tons, in accordance with OAC rule 3745-14-08(H).
- f) [Authority for term: OAC rules 3745-14-08(H) and 3745-77-07(C)(1)] Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- Install a boiler equipped with low NO_x burners and flue gas recirculation designed to achieve NO_x emissions of 0.0336 lb NO_x / mmBtu heat input.
- Applicable Compliance Method:
- The permittee shall demonstrate compliance with the allowable mass emission rate for NO_x in accordance with the methods and procedures specified in f)(2) below.
- b. Emission Limitation:
- Install a boiler equipped with proper burner design and good combustion practices to achieve CO emissions of 0.073 lb CO / mmBtu heat input.
- Applicable Compliance Method:
- The permittee shall demonstrate compliance with the allowable mass emission rate for CO in accordance with the methods and procedures specified in f)(2) below.
- c. Emission Limitation:
- NO_x emissions shall not exceed 0.20 pound per mmBtu of actual heat input.
- Applicable Compliance Method:
- The permittee shall demonstrate compliance with the allowable mass emission rate for NO_x in accordance with the methods and procedures specified in 40 CFR Part 60.46b.
- d. Emission Limitation:
- Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input.
- Applicable Compliance Method:
- If required, compliance with the pound per mmBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.
- e. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (2) Within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office and, pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 and ORC section 3704.03(I).

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (3) Emission Testing Requirements

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 2.5 years after permit issuance.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for CO and NO_x in the appropriate averaging period(s).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) and emission factors:
 - i. for CO, 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.
 - ii. for NO_x, 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7 or 7E.

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

- d. During the emission testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst

case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute “worst case”. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).
- f. Personnel from the Portsmouth 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.
- g. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth 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 Portsmouth Local Air Agency.

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

g) **Miscellaneous Requirements**

- (1) None.

2. P001, Cumene Oxidation

Operations, Property and/or Equipment Description:

Cumene Oxidation plant with the following air pollution control devices: condenser (3231-C); regenerative thermal oxidizer (RTO)

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0133285 issued 10/16/2025)	VOC emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 14.31 pounds per day and 2.63 tons per year, as a rolling, 12-month summation of the VOC emissions. Total particulate emissions from the RTO, for all equipment vented to the RTO, shall not exceed 0.68 pound per hour and 3.0 tons per year. Total NO_x emissions from the RTO, for all equipment vented to the RTO, shall not exceed 1.66 pounds per hour and 7.25 tons per year. Total CO emissions from the RTO, for all equipment vented to the RTO, shall not exceed 7.56 pounds per hour and 33.11 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20, and 40 CFR Part 63, Subparts F, G, and H, 40 CFR Part 60, Subparts VV and III, 40 CFR Part 61, Subpart



		FF, and OAC rules 3745-21-09(DD) and (EE).
b.	OAC rule 3745-31-10 through 20	Total VOC emissions (including acetone) from the RTO, for all equipment vented to the RTO, shall not exceed 6.18 pounds per hour and 27.04 tons per year, as a rolling, 12-month summation of the VOC emissions from the RTO stack. See b)(2)a.
c.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)i.
d.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G and H.
e.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123. See b)(2)c. and b)(2)d.
f.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	See B.2.
g.	40 CFR Part 60, Subpart III (40 CFR 60.610 – 60.618) [In accordance with 40 CFR 60.610(a)(2), this emissions unit is comprised of an air oxidation reactor	Except as otherwise allowed, the permittee shall reduce emissions of TOC (minus methane and ethane) by 98 weight-percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis



	with a recovery system constructed after October 21, 1983 that produces a chemical listed in 40 CFR 60.617.]	corrected to 3 percent oxygen, whichever is less stringent.
h.	40 CFR Part 60, Subpart VV	See B.2.
i.	OAC rule 3745-21-09(DD)	See B.2.
j.	OAC rule 3745-21-09(EE)	See b)(2)e. and b)(2)f.
k.	40 CFR Part 61, Subpart FF (40 CFR 61.340 – 358)	See d)(10), e)(6) and B.7.
l.	OAC rule 3745-18-06(E)	See b)(2)g.
m.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) (64.1 – 64.10) [In accordance with 40 CFR 64.2, this emissions unit is a major source of VOC emissions controlled with a catalytic oxidizer]	See b)(2)j., c)(1), c)(4), c)(5), d)(1), d)(2), d)(11), and d)(12).

(2) Additional Terms and Conditions

- a. This prevention of significant deterioration (PSD) best available control technology (BACT) determination requires volatile organic compound emissions that are vented to the regenerative thermal oxidizer (RTO) to be reduced by not less than 99% by weight.

The VOC emissions from the following modified equipment shall be vented to the RTO:

- i. oxidation reactors (201-DA, 201-DB, 201-DC, 201-DD, 201-DE, 201-DF, 201-DG, 201-DH, 201-DJ, 201-DK, 201-DL, and 201-DM; and
 - ii. oxidation product surge drum (208-F);
- b. In accordance with United States of America vs Altivia Petrochemicals LLC Consent Decree lodged November 22, 2022, the permittee shall implement controls on vessel 202-F. This permit modification allows the permittee to vent the VOC emissions from the 202-F oxidation reactor feed surge drum to the existing RTO.

- c. In accordance with 40 CFR 63.113(a)(2), for all Group 1 process vent streams, the emissions of total organic HAPs shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3-percent oxygen.

The VOC emissions from the following equipment shall be vented to the RTO:

- i. the oxidation reactors (201-DA, 201-DB, 201-DC, 201-DD, 201-DE, 201-DF, 201-DG, 201-DH, 201-DJ, 201-DK, 201-DL, and 201-DM; and
- ii. oxidation product surge drum (208-F);

The VOC emissions from the emergency CHP surge tank shall be vented to the 3231-C condenser.

The VOC emissions from the following equipment are uncontrolled:

222-F*	carbonate slurry tank
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206FA and 206FB *	carbonate dilution tanks
201-JAR and 201-JB	air compressor oil drums; and
201-E	cumene wash column
*222-F, 206-FA, and 206-FB tanks are still part of emission unit P001 but they no longer contain any VOC due to change in practice of using fresh non process recycle water	

- d. The following Group 1 process vents are subject to the provisions of 40 CFR 60, Subpart III, but are required to comply only with the requirement of 40 CFR Part 63, Subparts F, G, and H:
 - i. Air Oxidation reactor train and its combined spent air vent stream (201-DA, 201-DB, 201-DC, 201-DD, 201-DE, 201-DF, 201-DG, 201-DH, 201-DJ, 201-DK, 201-DL, and 201-DM and;
 - ii. oxidation product surge drum (208-F).
- e. Except where exempted under OAC rule 3745-21-09(EF)(2), the permittee shall vent process vent streams from the air oxidation processes, producing a chemical listed in Appendix A of OAC rule 3745-21-09, to a combustion device which:
 - i. reduces the VOC emissions vented to it with an efficiency of at least 98 percent by weight; or
 - ii. emits a VOC concentration less than 20 ppm by volume, dry basis.
- f. Any process vent stream or combination of process vent streams which maintain a total resource effectiveness (TRE) value greater than 1.0 shall be exempt from the requirements of OAC rule 3745-21-09(EF)(1). If an air oxidation process has more than one process vent stream, the TRE shall be based upon a combination of the process vent streams. The TRE shall be calculated in accordance with section OAC rule 3745-21-09(EF)(3).
- g. The RTO is fueled with natural gas and process vent gas only and has no process weight as defined in OAC rule 3734-18-01(B)(13). Therefore, this equipment is exempt from the emission limitation established in OAC rule 3745-18-06(E).
- h. There are no uncontrolled particulate emissions from the Cumene Oxidation process unit; therefore, OAC rules 3745-17-07(A) and 3745-17-11 are not applicable to the Cumene Oxidation process unit.
- i. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.

- iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.
 - j. The requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) are applicable to the regenerative thermal oxidizer (2550-L). However, per 40 CFR 64.4(b)(4), monitoring included for standards exempt from this part pursuant to 64.2(b)(1)(i) or (vi) are presumptively acceptable as CAM to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the pollutant-specific emissions unit. The monitoring is applicable to the control device since it is combustion zone temperature monitoring, which indicates proper operation with respect to both VOC and HAP emissions. Additionally, the HON MACT Subparts F, G, and H are covered by 64.2(b)(1)(i) since it is an "emission limitation or standard imposed by the Administrator after November 15, 1990, pursuant to section 112 of the [Clean Air] Act." Therefore, the HON required monitoring specified in section c)(1), c)(4), c)(5), d)(1), d)(2), d)(11), and d)(12) below for this emissions unit and the regenerative thermal oxidizer (2550-L) is presumptively acceptable as CAM.
- c) Operational Restrictions
- (1) In accordance with the permittee's permit application, the permittee is operating by routing the organic vapors from Group 1 process vents from the cumene oxidation process unit (emissions unit P001) to a regenerative thermal oxidizer (RTO) in order to comply with the percent reduction requirement or concentration limit specified in 40 CFR 63.113(a)(2).

The minimum firebox temperature of the regenerative thermal oxidizer (RTO) shall be at or above 1,476 degrees Fahrenheit (802 degrees Celsius) as a daily (calendar) average or the most recent agency-approved compliance test. This operating parameter was established during the 9/1/2010 RTO compliance test.

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]
 - (2) The permittee shall burn only process vent gases and/or natural gas in the regenerative thermal oxidizer (RTO).

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]
 - (3) Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or and external floating roof.

In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, these vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of initial permit issuance: 206-FA, 206-FB, 202-F, and 3232-F.

Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process

or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

[Authority for term: 40 CFR Part 63 and 3745-77-07(A)(1)]

- (4) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.102(a) [No longer applicable on or after July 15, 2027]	startup, shutdown and malfunctions
63.102(e) [Applicable no later than July 15, 2027]	comply with Subparts F, G, and H at all times
63.102(f) [Applicable no later than July 15, 2027]	operate and maintain any source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions
63.104(a)	heat exchanger leak repair
63.105(a)	management procedures for wastewater by complying with 63.105(b) through (e). On and after July 15, 2027, 63.105(d) and (e) no longer apply.

[Authority for term: 40 CFR Part 63 and 3745-77-07(A)(1)]

- (5) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.112(a) and (c)	emissions control requirements
63.113(a)	process vent control requirements
63.119(a)	storage vessel control requirements
63.120(d)	storage vessel control design
63.132(f)	restrictions on the discharge of liquid or solid organic materials
63.148(d) and (e)	leak repair requirements for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures

[Authority for term: 40 CFR Part 63 and 3745-77-07(A)(1)]

- d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain a temperature monitoring device, equipped with a continuous recorder, in the firebox of the regenerative thermal oxidizer (RTO) in accordance with the



requirements of 40 CFR 63.114(a). The permittee shall maintain records of the RTO firebox temperature in accordance with 40 CFR 63.118(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (2) The permittee shall monitor any bypass line(s) that could divert a Group 1 process vent away from the RTO in accordance with 40 CFR 63.114(d)(1), (2), and (3). Equipment such as leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to 40 CFR 63.114(d).
- a. Properly maintain and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or
 - b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
 - c. Beginning July 15, 2027, the use of a bypass line at any time on a closed vent system to divert emissions (subject to the limitations in 63.112) to the atmosphere or to a control device not meeting the requirements specified in this subpart, is an emissions violation.

The permittee shall maintain records of the flow indicator or monthly visual inspection requirements for bypass lines that could divert a Group 1 process vent away from the regenerative thermal oxidizer (RTO) in accordance with 40 CFR 63.118(a)(3) & (4).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) Prior to July 15, 2027, whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with 40 CFR 63.115(e).

The permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.117, 63.118(c), (d), and (e).

Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).

On or after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) For each Group 2 storage vessel, the permittee shall comply with the record keeping requirements of 40 CFR 63.123(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (5) For each Group 1 process wastewater stream, the permittee shall comply with the requirements of 40 CFR 63.132 through 64.149.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]



- (6) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105.
[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]
- (7) The total resource effectiveness value for an air oxidation process shall be calculated in accordance with the following equations:
- a. For non-chlorinated process vent streams with a net heating value less than or equal to 3.6 and for all chlorinated process vent streams:
$$TRE = [a + bW.88 + cW + dWH + eW.88 H.88 + fW.5] / E$$

where:
TRE = total resource effectiveness value;
E = maximum hourly VOC emission rate at the vent stream design flow rate (W), in kilograms of VOC per hour (kg/hr);
W = vent stream design flow rate at a standard temperature of twenty degrees Celsius, in standard cubic meters per minute (scm/min);
H = vent stream net heating value, as determined in accordance with OAC rule 3745-21-10(P)(2), in megajoules per standard cubic meter (106J/scm); and
a, b, c, d, e, and f = applicable coefficients from Appendix B of OAC rule 3745-21-09.
- b. For non-chlorinated process vent streams with a net heating value greater than 3.6:
$$TRE = [a + bW.88 + cW + dWH + eW.88 H.88 + f(WH / 3.6).5] / E$$

where TRE, E, W, H, a, b, c, d, e, and f are defined as above.
[Authority for term: OAC rule 3745-21-09(E) and 3745-77-07(C)(1)]
- (8) The parameters used in the total resource effectiveness equations required by OAC rule 3745-21-09(E)(3) shall be measured at the outlet(s) of the final product recovery device(s) where VOC is reclaimed for beneficial reuse (recycle, sale or use in another part of the process).
[Authority for term: OAC rule 3745-21-09(E) and 3745-77-07(C)(1)]
- (9) For each day which the permittee burns a fuel other than process vent gases and/or natural gas in the regenerative thermal oxidizer (RTO), the permittee shall maintain a record of the type and quantity of fuel burned.
[Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1)]
- (10) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR Part 61.356 and section B.7 of the Facility-Wide Terms and Conditions.
[Authority for term: 40 CFR Part 61 and 3745-77-07(C)(1)]
- (11) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (12) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.114(a)	requirement to install catalyst bed temperature monitoring devices
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 49 CFR 63.119(e)
63.148(a)	comply with the leak inspection provisions of 63.148(b) through (j) for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process wastewater, including reports of each excursion, (i.e. each period when a monitored parameter is outside the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv).

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (2) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5). On and after July 15, 2027, the requirement submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5) no longer applies.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (3) Except as specified in 63.113(a)(4), whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.

- a. the recalculated TRE index value is less than or equal to 1.0;
- b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
- c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
- d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (4) The permittee shall submit reports of any fuels burned other than process vent gases and/or natural gas in the regenerative thermal oxidizer (RTO) within 30 days of such occurrence to the Portsmouth Local Air Agency, including the date, type, and amount of any such fuel burned.

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 63, and 3745-77-07(C)(1)]

- (5) The permittee shall submit all reports required by 40 CFR Part 63, Subparts F, G, and H to Ohio EPA via Air Services, in accordance with 40 CFR 63.103(d). The permittee may elect to send HON MACT compliance reports to both Ohio EPA and U.S. EPA.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (6) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR Part 61.357 and section B. of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61, and 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions from all equipment except for the RTO and fugitive equipment leaks shall not exceed 14.31 pounds per day.

VOC emissions from all equipment except for the RTO and fugitive equipment leaks shall not exceed 2.63 tons per year, as a rolling, 12-month summation of the VOC emissions.

Applicable Compliance Method

The VOC emissions (potential to emit) from the equipment listed below shall be summed. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation per month and the conversion factor on ton/2000 lbs, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months emissions to determine the rolling, 12-months total emissions.

If required, compliance shall be determined in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A.

Equipment ID	Equipment Description	Egress Point	Control Device	VOC (lb/day)	VOC (tpy)	Notes
222-F	Carbonate slurry tank	OX02	None	0	0	4
206-FA	Carbonate dilution tank	OX03	None	0	0	4
206-FB	Carbonate dilution tank	OX04	None	0	0	4
201-JAR	Air compressor oil drum	OX09	None	<0.01	<0.01	2
201-JB	Air compressor oil drum	OX10	None	<0.01	<0.01	2
201-E	Cumene wash column	OX13	None	0.02	<0.01	2
3232-F	Emergency CHP surge tank	OX14	3231-C Condenser	11.41	2.08	1
AOxA	Oxygen Analyzer #1	OX15	None	0.22	0.04	3
AOxB	Oxygen Analyzer #2	OX16	None	0.22	0.04	3
AOxC	Oxygen	OX17	None	0.22	0.04	3

	Analyzer #3					
AOxD	Oxygen Analyzer #4	OX18	None	0.22	0.04	3
AOxE	Oxygen Analyzer #5	OX19	None	0.22	0.04	3
AOxF	Oxygen Analyzer #6	OX20	None	0.22	0.04	3
AOxG	Oxygen Analyzer #7	OX21	None	0.22	0.04	3
AOxH	Oxygen Analyzer #8	OX22	None	0.22	0.04	3
AOxJ	Oxygen Analyzer #9	OX23	None	0.22	0.04	3
AOxK	Oxygen Analyzer #10	OX24	None	0.22	0.04	3
AOxL	Oxygen Analyzer #11	OX25	None	0.22	0.04	3
AOxM	Oxygen Analyzer #12	OX26	None	0.22	0.04	3
N/A	Oxygen Analyzer #13	OX27	None	0.22	0.04	3

1.VOC emissions (lb/day and tpy) from this equipment are controlled. The VOC emissions include the emissions reductions due to the control device. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00500). Individual equipment VOC (lb/day and tpy) values are not independently enforceable in this permit.



2.VOC emissions (lb/day and tpy) from this equipment are uncontrolled. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00500). Individual equipment VOC (lb/day and tpy) values are not independently enforceable in this permit.

3.VOC emissions (lb/day and tpy) from this equipment are uncontrolled. These values represent the potentials to emit. Each analyzer vent emits 0.0093 lb/hr and the calculation is based on a small slip stream of spent air from each oxidizer routed to the oxygen analyzer then vented to atmosphere. Individual equipment VOC (lb/day and tpy) values are not independently enforceable in this permit.

4.222-F, 206-FA, and 206FB are still part of P001, but they no longer contain any VOC.

b. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 0.68 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 3.0 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

d. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 1.66 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

e. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.25 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.



f. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.56 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 33.11 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

h. Emission Limitation:

Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 6.18 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25 or 25A, as appropriate.

i. Emission Limitation:

Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 27.04 tons per year, as a rolling, 12-month summation of the VOC emissions.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation each month and then dividing by 2000 pounds per ton, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-months total emissions.

j. Emission Limitation:

The emissions of total organic HAP from Group 1 process vents shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3% oxygen.

Applicable Compliance Method:

Compliance with the concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the RTO, shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18. The test methods and procedures



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

k. Emission Limitation:

VOC emissions that are vented to the regenerative thermal oxidizer (RTO) shall be reduced by not less than 99%, by weight.

Applicable Compliance Method:

If required, the concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the RTO, shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18. The test methods and procedures selected shall be based on a reconsideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 63, and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, the emission testing for the regenerative thermal oxidizer (RTO) in accordance with the following requirements:

- a. Permit to install P0133285 required the permittee to submit to EPA for review and approval within 60 days of implementation of controls on Vessel 202-F, a Performance Test Protocol in accordance with EPA Methods and 40 CFR Part 63, Subparts F and G. The permittee submitted the Performance Test Protocol to USEPA for review and approval on January 7, 2026.
- b. The emission testing for the RTO serving emissions units P001, P007, and P009, shall be conducted by no later than 60 days following EPA approval of the Performance Test Protocol to demonstrate compliance with the allowable VOC emission rate, the VOC control efficiency, and the HAP concentration (ppm) and/or HAP control efficiency, or within 3 months of the issuance of the Title V permit, whichever is earlier. The control efficiency is the percent reduction in mass emissions between the inlet and outlet of the control device.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for the hourly VOC emission limitation, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A;
 - ii. for the VOC control efficiency, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A; and
 - iii. for HAP concentration (ppm) and/or control efficiency, U.S. EPA Methods 1 through 4, and 18, 40 CFR Part 60, Appendix A.

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

- 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 Portsmouth Local Air Agency.

- e. The hourly VOC emission limitation and VOC control efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternate test protocol. 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.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameter, 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).
- g. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information as 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following the 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 Portsmouth Local Air Agency.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

3. P006, AMS Hydrogenation Process Unit

Operations, Property and/or Equipment Description:

AMS Hydrogenation Process Unit with the following air pollution control devices: condenser (3516-C)

- 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 operation(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 are identified below. 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
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a.	OAC rule 3745-31-05(A)(3) (PTI 07-00451 issued 2/25/2008)	Volatile organic compound (VOC) emissions from all equipment except fugitive equipment leaks shall not exceed 16.71 pounds per day and 3.05 tons per year. See b)(2)a.
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)b.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
d.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.
e.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	See B.2.
f.	40 CFR Part 60, Subpart VV	See B.2.
g.	OAC rule 3745-21-09(DD)	See B.2.

(2) Additional Terms and Conditions

- a. BAT determination: vent condenser and compliance with applicable requirements for HON group 2 process vents (for existing sources).
- b. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) The average temperature of the liquid ammonia coolant in the condenser (3516-C), on a daily basis, shall not be greater than 41 degrees Fahrenheit.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (2) Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.

In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks, did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, these vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of initial permit issuance: 3510-F.

Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)].

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the liquid ammonia coolant in the condenser (3516-C) at least once every 15 minutes when the AMS Hydrogenation process unit is in operation. The equipment used to monitor temperature must have a minimum accuracy of



(a) +/- 1 percent of the temperature being monitored expressed in degrees Celsius (°C) or (b) +/- 0.5 degrees (°C), whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day the AMS Hydrogenation process unit is in operation.

- a. the average temperature of the liquid ammonia coolant in the condenser (3516-C) on a daily calendar basis; and
- b. a log or record of downtimes for the capture (collection) system, control device, monitoring equipment, and the AMS Hydrogenation process unit.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

- (2) Prior to July 15, 2027, whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with 40 CFR 63.115(e).

The permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.117 and 40 CFR 63.118(c), (d), and (e).

Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).

On and after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR 61.356.

[Authority for term: 40 CFR Part 61 and 3745-77-07(C)(1)]

- (5) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (6) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:



63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 49 CFR 63.119(e)
63.148(a)	comply with the leak inspection provisions of 63.148(b) through (j) for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable in accordance with 63.113(a)(4), i.e. after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly temperature deviation (excursion) reports that identify all periods during which the average temperature of the liquid ammonia coolant in the condenser (3516-C) on a daily calendar basis exceeded the temperature limitation specified above.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

- (2) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process wastewater, including reports of each excursion (i.e. each period when a monitored parameter is outside the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5). On and after July 15, 2027, the requirement submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5) no longer applies.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) Except as specified in 63.113(a)(4), whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.
- a. the recalculated TRE index value is less than or equal to 1.0;
 - b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
 - c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
 - d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (5) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357(a)(1) through (a)(3).

[Authority for term: 40 CFR Part 61 and 3745-77-07(C)(1)]

- (6) The deviation reports shall be submitted in accordance with the requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: OAC rules 3745-15-03(A) and 3745-77-07(C)(1)]

- (7) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency, with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d) & (d)(1).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (8) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable in accordance with 63.113(a)(4), i.e. after July 15, 2027]]	process vent reporting

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions from all equipment except fugitive equipment leaks shall not exceed 16.71 pounds per day.

VOC emissions from all equipment except fugitive equipment leaks shall not exceed 3.05 tons per year.

Applicable Compliance Method

The VOC emissions (potential to emit) from the following equipment as listed below shall be summed.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A.

Equipment ID	Equipment Description	Egress Point	Control Device	VOC (lb/day)	VOC (tpy)	Notes
3512-F	Hydrogenation product drum	AH01	3516-C Condenser	16.71	3.05	1

- VOC emissions (lb/hr and tpy) from this equipment are controlled. The VOC emissions include the emissions reductions due to the control device. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00451). Individual equipment VOC (lb/hr and tpy) values are not independently enforceable in this permit.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

4. P007, Phenol II Process Unit

Operations, Property and/or Equipment Description:

Phenol II plant with the following air pollution control devices: condenser (3301-C); scrubber (3310-E); regenerative thermal oxidizer (RTO)

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0133285 issued 10/16/2025)	Volatile organic compound (VOC) emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 208.43 pounds per day and 38.04 tons per year, as a rolling, 12-month summation of the VOC emissions. Total particulate emissions from the RTO, for all equipment vented to the RTO, shall not exceed 0.68 pound per hour and 3.0 tons per year. Total nitrogen oxides (NO_x) emissions from the RTO, for all equipment vented to the RTO, shall not exceed 1.66 pounds per hour and 7.25 tons per year. Total carbon monoxide (CO) emissions from the RTO, for all equipment vented to the RTO, shall not exceed 7.56 pounds per hour and 33.11 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20, and 40 CFR Part 63, Subparts F, G, and H, 40 CFR Part 60, Subparts VV and NNN, 40 CFR Part 61, Subpart FF, and OAC rule 3745-21-09(DD).



b.	OAC rule 3745-31-10 through 20	Total VOC emissions (including acetone) from all modified equipment, [including egress points P201 (including primary cumene stripper 3202-E jet condenser system (3204-L)), P216, and P219] except for the RTO and fugitive equipment leaks shall not exceed 3.59 pounds per day and 0.66 ton per year, as a rolling, 12-month summation of the VOC emissions. Total VOC emissions (including acetone) from the RTO, for all equipment vented to the RTO, shall not exceed 6.18 pounds per hour and 27.04 tons per year, as a rolling, 12-month summation of the VOC emissions from the RTO. See b)(2)a.
c.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)m.
d.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
e.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.
f.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184)	See B.2.



	[in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	
g.	40 CFR Part 60, Subpart NNN	See b)(2)d through b)(2)g.
h.	40 CFR Part 61, Subpart FF (40 CFR 61.340 – 61.358)	See d)(19), e)(10) and B.7.
i.	40 CFR Part 60, Subpart VV	See B.2.
j.	OAC rule 3745-21-09(DD)	See B.2.
k.	OAC rule 3745-18-06(E)	See b)(2)h.
l.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) (64.1 – 64.10) [In accordance with 40 CFR 64.2, this emissions unit is a major source of VOC emissions controlled with a catalytic oxidizer]	See b)(2)m., c)(3), d)(3), d(4), d(20), and d)(21).

(2) Additional Terms and Conditions

- a. This prevention of significant deterioration (PSD) best available control technology (BACT) determination requires volatile organic compound emissions that are vented to the regenerative thermal oxidizer (RTO) to be reduced by not less than 99% by weight. The VOC emissions from the following modified equipment shall be vented to the RTO: the crude acetone column reflux drum (3304-F) and the acetone topping column reflux drum (3307-F).

The VOC emissions from the following modified equipment is uncontrolled: primary cumene stripper 3202-E jet condenser system (3204-L), hydrocarbon removal column 3305-E reflux drum (3318-F) and cleavage reactor 3202-DR jet condenser system (3207-L).

The PSD BACT determinations for the process vent emissions from the hydrocarbon removal system (3305-E), the primary cumene stripper (3202-E), and the cleavage reactor (3202-DR) requires maintaining existing operating conditions and does not require add on controls.

The PSD BACT determination for fugitive emissions from the Phenol II process unit requires compliance with the leak detection and repair program required by 40 CFR Part 63, Subpart H.

- b. In accordance with 40 CFR 63.113(a)(2), for all Group 1 process vent streams, the emissions of total organic HAPs shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3-percent oxygen.

The VOC emissions from the following equipment shall be vented to the regenerative thermal oxidizer (RTO):



3304-F	crude acetone column reflux drum; and
3307-F	acetone topping column reflux drum

The VOC emissions from the following equipment is uncontrolled:

3203-LR	preflash separator 3209-F jet condenser system
3204-L	primary cumene stripper 3202-E jet condenser system
3205-L	secondary cumene stripper 3203-E jet condenser system
3214-F	CHP drain vessel
3227-L	pre-secondary cumene stripper 3227-E jet condenser system
3343-F	crude acetone column 3301-E preheater wash tank
3321-FA/FB	phenol rundown tanks
3226-F	neutralizer drain vessel
3330-F	phenol drain tank
3320-F	phenol finishing column 3304-E jet condenser system
3318-F	hydrocarbon removal column 3305-E reflux drum
3302-L	acetone finishing column 3303-E jet condenser system
3303-L	crude phenol column 3304-E jet condenser system; and
3207-L	cleavage reactor 3202-DR jet condenser system

The VOC emissions from the following equipment shall be vented to the 3301-C condenser:

3217-F	neutralizer tank
3218-F	acid wash drum
3301-F	fractionation feed tank
3303-F	phenolic water tank; and
3380-E	recovery column

The acetone rundown tanks (3312-FA and 3312-FB) shall be equipped with an internal floating roof.

The VOC emissions from the crude acetone column 3301-E bottoms surge tank shall be controlled by the 3310-E scrubber.

- c. In accordance with 40 CFR 63.172(b), the scrubber (3310-E) shall be designed and operated to recover the organic hazardous air pollutant emissions or volatile organic compound emissions vented to it with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
- d. The requirements of 40 CFR Part 60, Subpart NNN apply to the following distillation units and associated recovery equipment within the Phenol II process unit:

Egress Point	Distillation Column	Equipment Number
P201	Pre-Secondary Cumene Stripper	3327-E
UT09	Crude Acetone Column	3301-E
P215	Phenol Finishing Column	3307-E
P216	Hydrocarbon Removal Column	3305-E
P217	Acetone Finishing Column and Acetone Stripper	3303-E and 3309-E
P218	Crude Phenol Column	3304-E
P201	Secondary Cumene Stripper	3203-E
P201	Primary Cumene Stripper	3202-E
UT09	Acetone Topping Column	3302-E
P204	Phenol Recovery Column	3380-E

- e. In accordance with 40 CFR 60.660(c)(4), equipment subject to 40 CFR Part 60, Subpart NNN with a total resource effectiveness (TRE) index value of greater than 8.0 are exempt from the requirements of 40 CFR Part 60, Subpart NNN except for the requirements specified in 60.662, 60.664(d), 60.664(e), 60.664(f), 60.665(h) and 60.665(l). According to the permittee's permit application, the following distillation columns have a TRE index value greater than 8.0: 3227-E, 3304-E, 3305-E, and 3380-E.
- f. In accordance with 40 CFR 60.660(c)(6), the equipment subject to 40 CFR Part 60, Subpart NNN with a vent stream flow rate less than 0.008 standard cubic meters per minute (scm/min) are exempt from the requirements of 40 CFR Part 60 Subpart NNN except for the requirements specified in 60.664(h) and 60.665(i), 60.665(l)(5), and 60.665(o). At the time of permit issuance, the following distillation columns have a flow rate less than 0.008 standard cubic meters per minute: 3307-E, 3303-E, 3202-E, 3209-F, and 3203-E.
- g. In accordance with 40 CFR 60.662, equipment subject to 40 CFR Part 60, Subpart NNN with a TRE index equal to or less than 8.0 and a flow rate equal to or greater than 0.008 standard cubic meters per minute (scm/min) shall comply with one of the following:
 - i. reduce the emissions of total organic compound (TOC) by 98% by weight or to a concentration of 20 ppmv TOC, on a dry basis corrected to 3% oxygen;
 - ii. combust the emissions in a flare that meets the requirements of 40 CFR 60.18; or
 - iii. maintain a TRE index value greater than 1.0 without the use of VOC emission control devices.
- h. The regenerative thermal oxidizer (RTO) is fueled with natural gas and process vent gas only and has no process weight as defined in OAC rule 3734-18-01(B)(13). Therefore, this equipment is exempt from the emission limitation established in OAC rule 3745-18-06(E).



- i. There are no uncontrolled particulate emissions from the Phenol II process unit; therefore, OAC rules 3745-17-07(A) and 3745-17-11 are not applicable to the Phenol II process unit.
- j. The crude acetone columns bottom surge tank (3302-F) is a bottoms receiver tank with a capacity of 640.5 cubic meters, containing material with a maximum true organic HAP vapor pressure of 11.17 psia at operating temperature, and the organic vapors vented from the tank are not vented back to the process. Therefore, the bottoms receiver tank shall be vented to a control device that complies with the requirements of 40 CFR 63.172.

In accordance with the permittee's permit application, the permittee is operating by routing the organic vapors from the bottoms receiver tank to a scrubber (3310-E). Whenever organic HAP are vented to a closed-vent system or control device used to comply with 40 CFR Part 63 Subpart H, such system or control device shall be operating. The scrubber (3310-E) shall be designed and operated to recover the organic hazardous air pollutant emission or volatile organic compound emissions vented to it with an efficiency of 95% or greater, to an exit concentration of 20 ppmv, whichever is less stringent.

- k. Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.

In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks, did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, the following vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of initial permit issuance: 3214-F, 3342-F, 3343-F, 3217-F, 3218-F, 3301-F, 3303-F, 3321-FB, 3226-F, and 3330-F.

Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

- l. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.

- iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.
 - m. The requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) are applicable to the regenerative thermal oxidizer (2550-L). However, per 40 CFR 64.4(b)(4), monitoring included for standards exempt from this part pursuant to 64.2(b)(1)(i) or (vi) are presumptively acceptable as CAM to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the pollutant-specific emissions unit. The monitoring is applicable to the control device since it is combustion zone temperature monitoring, which indicates proper operation with respect to both VOC and HAP emissions. Additionally, the HON MACT Subparts F, G, and H are covered by 64.2(b)(1)(i) since it is an "emission limitation or standard imposed by the Administrator after November 15, 1990, pursuant to section 112 of the [Clean Air] Act." Therefore, the HON required monitoring specified in section c)(3), d)(3), d)(4), d)(20), and d)(21) below for this emissions unit and the regenerative thermal oxidizer (2550-L) is presumptively acceptable as CAM.
- c) Operational Restrictions
 - (1) The average temperature of the liquid ammonia coolant in the condenser (3301-C), on a daily basis, shall not be greater than 41 degrees Fahrenheit.
[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]
 - (2) The scrubber (3310-E) water flow rate shall be continuously maintained at a value of not less than 6 gallons per minute as a daily average at all times while the Phenol II process unit is in operation.
[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]
 - (3) In accordance with the permittee's permit application, the permittee is operating by routing the organic vapors from Group 1 process vents from the Phenol II process unit (emissions unit P007) to a regenerative thermal oxidizer (RTO) in order to comply with the percent reduction requirement or concentration limit specified in 40 CFR 63.113(a)(2).

The minimum firebox temperature of the regenerative thermal oxidizer (RTO) shall be at or above 1,476 degrees Fahrenheit (802 degrees Celsius) as a daily (calendar) average. This operating parameter was established during the 9/1/2010 RTO compliance test.
[Authority for term: 40 CFR Part 63, OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]
 - (4) The permittee shall burn only process vent gases and/or natural gas in the regenerative thermal oxidizer (RTO).
[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]
 - (5) The Phenol II Hub and the CHP Hub shall be equipped with tightly fitting solid covers in accordance with 40 CFR 63.149.
[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(A)(1)]
- d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and record the temperature of the liquid ammonia coolant in the condenser (3516-C) at least once every 15 minutes when the Phenol II process unit is in operation. The equipment used to monitor temperature must have a minimum accuracy of (a) +/- 1 percent of the temperature being monitored expressed in degrees Celsius (oC) or (b) +/- 0.5 degrees (oC), whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day the AMS Hydrogenation process unit is in operation.

- a. the average temperature of the liquid ammonia coolant in the condenser (3301-C) on a daily calendar basis; and
- b. a log or record of downtimes for the capture (collection) system, control device, monitoring equipment, and the Phenol II process unit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall monitor the closed vent system which routes the organic vapors from the crude acetone bottom surge tank (3302-F) to the scrubber (3310-E) in accordance with 40 CFR 63.172(f) through 63.172(l).

The permittee shall monitor the scrubber (3310-E) to ensure that it is operated and maintained in conformance with its design as required by 40 CFR 63.172(e). The permittee shall properly operate and maintain equipment to monitor and record the scrubber water flow rate for the scrubber (3310-E) while the Phenol II process unit is in operation. The monitoring devices and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information once per day:

- a. the daily average scrubber water flow rate, in gallons per minute; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the Phenol II process unit.

[Authority for term: 40 CFR Part 63, OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain a temperature monitoring device, equipped with a continuous recorder, in the firebox of the regenerative thermal oxidizer (RTO) in accordance with the requirements of 40 CFR 63.114(a). The permittee shall maintain records of the RTO firebox temperature in accordance with 40 CFR 63.118(a).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall monitor any bypass line(s) that could divert a Group 1 process vent away from the RTO in accordance with 40 CFR 63.114(d)(1), (2), and (3). Equipment such as leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to 40 CFR 63.114(d).

- a. Properly maintain and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or



- b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
- c. Beginning July 15, 2027, the use of a bypass line at any time on a closed vent system to divert emissions (subject to the limitations in 63.112) to the atmosphere or to a control device not meeting the requirements specified in this subpart, is an emissions violation.

The permittee shall maintain records of the flow indicator or monthly visual inspection requirements for bypass lines that could divert a Group 1 process vent away from the regenerative thermal oxidizer (RTO) in accordance with 40 CFR 63.118(a)(3) & (4).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (5) Prior to July 15, 2027, whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with 40 CFR 63.115(e).

The permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.117, 63.118(c), (d), and (e).

Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).

On or after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (6) For each Group 2 storage vessel, the permittee shall comply with the record keeping requirements of 40 CFR 63.123(a).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (7) For each Group 2 process wastewater stream, the permittee shall comply with the record keeping requirements of 40 CFR 63.147.

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall monitor the cooling water at the inlet and outlet of the Phenol II heat exchange system for the presence of cumene in accordance with 40 CFR 63.104(b), (d), and (e). On a quarterly basis, the permittee shall obtain three samples from the inlet and three samples from the outlet of the heat exchanger. The permittee shall analyze the samples in accordance with the methods and procedures of Method 624 of 40 CFR Part 136, Appendix A. The results of the analysis shall be evaluated as specified in 40 CFR 63.104(b).

The permittee shall maintain heat exchange records in accordance with 40 CFR 63.104(f)(1).

No later than July 15, 2027, the site must monitor each heat exchange system according to 63.104(g) and cease monitoring according to 63.104(b) and/or (c), and whenever a leak is detected, the site must comply with 63.104(h) through (j).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105. On and after July 15, 2027, 63.105(d) and (e) no longer apply.
- [Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]
- (10) In accordance with 40 CFR 60.664(e), the net heating value of the gas combusted for determining the process vent stream TRE index value to determine compliance under 40 CFR 60.662(c) shall be determined in accordance with the equations and procedures in 40 CFR 60.664(e)(1) or (e)(2).
- [Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]
- (11) For purposes of complying with 40 CFR 60.662(c), the permittee shall comply with 60.664(f) and determine the TRE index value by calculating values using both the incinerator equation in 40 CFR 60.664(f)(1) and the flare equation in 40 CFR 60.664(f)(2) and selecting the lower of the two values.
- [Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]
- (12) The permittee uses a regenerative thermal oxidizer (RTO) to comply with the TOC emission limit specified under 60.662(a) for two distillation columns with TRE index values less than 1.0 (or assumed to be less than 1.0): 3301-E and 3302-E. For these two distillation columns, the permittee shall comply only with the monitoring, testing, record keeping, and reporting of 40 CFR 63 Subpart G for Group 1 process vent in accordance with procedures for regulatory overlap in 40 CFR 63.110(d).
- [Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]
- (13) In accordance with 40 CFR 60.664(g), the permittee seeking to comply with 40 CFR 60.660(c)(4) or 40 CFR 60.662(c) shall recalculate the TRE index value for that affected facility whenever process changes are made. Examples of process changes include changes in production capacity, feedstock type, or catalyst type, or whenever there is replacement, removal or addition of recovery equipment. The TRE index value shall be recalculated based on test data, or on best engineering estimates of the effects of the change to the recovery system.
- a. Where the recalculated TRE index value is less than or equal to 1.0, the permittee shall notify the Administrator, with a copy to the Portsmouth Local Air Agency, within 1 week of the recalculation and shall conduct a performance test according to the methods and procedures required by 40 CFR 60.664 in order to determine compliance with 40 CFR 60.662(a). Performance tests shall be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.
- b. When the initial TRE index value is greater than 8.0 and the recalculated TRE index value is less than or equal to 8.0 but greater than 1.0, the permittee shall conduct a performance test in accordance with 40 CFR 60.8 and 40 CFR 60.664 and shall comply with 40 CFR 60.663, 60.664, and 60.665. Performance tests must be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.
- [Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]
- (14) In accordance with 40 CFR 60.663(e), the permittee seeking to comply with the TRE index value limit specified under 40 CFR 60.662(c) of greater than or equal to 1.0, shall install, calibrate, maintain, and operate according to manufacturer's specifications the equipment



specified in 40 CFR 60.663(e)(1), (2), or (3), unless alternate monitoring procedures or requirements are approved for that facility by the Administrator.

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (15) In accordance with 40 CFR 60.665, the permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.662(c):

- a. any changes in production capacity feedstock type, catalyst type, or of any replacement, removal, or addition of recovery equipment or a distillation unit;
- b. any recalculation of the TRE performed pursuant to 40 CFR 60.664(g); and
- c. the results of any performance test performed pursuant to 40 CFR 60.664(e).

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (16) In accordance with 40 CFR 60.664(h), the permittee shall use Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A as appropriate, for determination of the flow rate to demonstrate compliance with 40 CFR 60.660(c)(6).

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (17) In accordance with 60.665(i), the permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.660(c)(6):

- a. that the vent stream flow rate is less than 0.008 standard cubic meter per minute; and
- b. any change in equipment or process operation that increases the vent stream flow rate including a measurement of the new vent stream flow rate.

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (18) For each day during which the permittee burns a fuel other than process vent gases and/or natural gas in the regenerative thermal oxidizer (RTO), the permittee shall maintain a record of the type of fuel burned.

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (19) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR 61.356, 40 CFR 63.356(a), and 61.356(b) and section B.7 of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61, 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (20) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (21) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:



63.114(a)	requirement to install catalyst bed temperature monitoring devices
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 40 CFR 63.119(e)
63.148(a)	comply with the leak inspection provisions of 63.148(b) through (j) for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly temperature deviation (excursion) reports that identify all periods during which the average temperature of the liquid ammonia coolant in the condenser (3516-C) on a daily calendar basis exceeded the temperature limitation specified above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber (3310-E) water flow rate was not maintained at or above the required levels.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process

wastewater, including reports of periods when monitored parameters are outside of their established ranges.

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (5) Whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.

- a. the recalculated TRE index value is less than or equal to 1.0;
- b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
- c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
- d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (6) For each heat exchange system, the permittee shall comply with the reporting requirements of 40 CFR 63.104(f)(2).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall submit information required in 40 CFR 60.665(b)(4) when demonstrating compliance with the TRE index value of greater than 1.0 option of 40 CFR 60.662(c).

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall submit semiannual reports of the following recorded information:

- a. Any change in equipment or process operation that increases the operating vent stream flow rate above the low flow exemption level in 40 CFR 60.660(c)(6), including a measurement of the new vent stream flow rate, as recorded under 40 CFR 60.665(i). These must be reported as soon as possible after the change and no later than 180 days after the change. These reports may be submitted either in conjunction with semi-annual reports or as a single separate report. A performance test must be completed with the same time period to verify the recalculated flow value and to obtain the vent stream characteristics of heating value and ETOC. The performance test is subject to the requirements of 40 CFR 60.8. Unless the facility qualifies for an exemption under the low capacity exemption status in 40 CFR 60.660(c)(5), the facility must begin compliance with the requirements set forth in 40 CFR 60.662.
- b. Any recalculation of the TRE index value, as recorded under 40 CFR 60.665(h).

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall submit reports of any fuels burned in the regenerative thermal oxidizer (RTO) other than process vent gases and/or natural gas within 30 days to the Portsmouth Local Air Agency, including the date, type, and amount of any such fuel burned.

[Authority for term: OAC rule 3745-31-05, and OAC rule 3745-77-07(C)(1)]

- (10) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357 and section B.7 of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61, and OAC rule 3745-77-07(C)(1)]

- (11) The deviation reports shall be submitted in accordance with the requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (12) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency, with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d) & (d)(1).

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (13) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

- (14) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent reporting

[Authority for term: 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions (including acetone) from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 208.43 pounds per day.

VOC emissions (including acetone) from all equipment except for the RTO and fugitive equipment leaks shall not exceed 38.04 tons per year, as a rolling, 12-month summation of the VOC emissions.

VOC emissions (including acetone) from all modified equipment [including egress points P201 (including primary cumene stripper 3202-E jet condenser system (3204-L), P216 and P219] except for the RTO and fugitive equipment leaks shall not exceed 3.59 pounds per day.

VOC emissions (including acetone) from all modified equipment [including egress points P201 (including primary cumene stripper 3202-E jet condenser system (3204-L), P216 and P219] except for the RTO and fugitive equipment leaks shall not exceed 0.66 ton per year, as a rolling, 12-month summation of the VOC emissions.

Applicable Compliance Method

The VOC and acetone emissions (potential to emit) from the equipment listed below shall be summed. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation per month and the conversion factor of ton/2000 lbs, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months emissions to determine the rolling, 12-month total emissions.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Equipment ID	Equipment Description	Egress Point	Control Device	VOC (lb/day)	VOC (tpy)	Acetone (lb/day)	Acetone (tpy)	Notes
3203-LR	Pre-flash separator 3209-F jet condenser system	P201	None	0.05	0.01	0	0	2
3204-L	Primary cumene stripper 3202-E jet condenser system	P201	None	<0.01	<0.01	0	0	2
3205-L	Secondary cumene stripper 3203-E jet condenser system	P201	None	0.02	<0.01	0	0	2
3214-F	CHP drain vessel	P201	None	1.73	0.32	0	0	2
3227-L	Pre-secondary	P201	None	0.06	0.01	0	0	2



	cumene stripper 3227-E jet condenser system							
3342-F	Caustic dilution tank	P202	None	0	0	0	0	2
3343-F	Crude acetone column 3301-E preheater wash tank	P203	F-402 Baghouse	<0.01	<0.0 1	0.01	<0.01	2
3217-F	Neutralizer tank	P204	3301-C Condense r	0.04	0.01	2.12	0.39	1
3218-F	Acid wash tank	P204	3301-C Condense r	0.04	0.01	2.30	0.42	1
3301-F	Fractionatio n feed tank	P204	3301-C Condense r	0.66	0.12	37.26	6.80	1
3303-F	Phenolic water tank	P204	3301-C Condense r	<0.01	<0.0 1	<0.01	<0.01	1
3321-FA	Phenol rundown tank	P205	None	40.63	7.42	0	0	2
3321-FB	Phenol rundown tank	P206	None	40.63	7.42	0	0	2
3312-FA	Acetone rundown tank	P207	Internal floating roof	0	0	35.71	6.52	1
3312-FB	Acetone rundown tank	P208	Internal floating roof	0	0	35.71	6.52	1
3302-F	Crude acetone column 3301-E bottoms surge tank	P209	3310-E Scrubber	7.44	1.36	0	0	1
3226-F	Neutralizer drain vessel	P210	None	<0.01	<0.0 1	0.01	<0.01	2
3330-F	Phenol drain tank	P214	None	<0.01	<0.0 1	0.01	<0.01	2



3320-F	Phenol finishing column 3304-E jet condenser system	P215	None	0.12	0.02	0	0	2
3318-F	Hydrocarbon removal column 3305-E reflux drum	P216	None	2.12	0.39	0.98	0.18	2
3302-L	Acetone finishing column 3303-E jet condenser system	P217	None	<0.01	<0.01	<0.01	<0.01	2
3303-L	Crude phenol column 3304-E jet condenser system	P218	None	0.30	0.05	0.01	<0.01	2
3207-L	Cleavage reactor 3202-DR jet condenser system	P219	None	0.01	<0.01	0.48	0.09	2

1.VOC and acetone emissions (lb/hr and tpy) from this equipment are controlled. The VOC emissions include the emissions reductions due to the control device. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00500). Individual equipment VOC and acetone (lb/hr and tpy) values are not independently enforceable in this permit.

2.VOC and acetone emissions (lb/hr and tpy) from this equipment are uncontrolled. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00500). Individual equipment VOC and acetone (lb/hr and tpy) values are not independently enforceable in this permit.

b. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 0.68 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 3.0 tons per year.

Applicable Compliance Method:



Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

d. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 1.66 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

e. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.25 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

f. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.56 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 33.11 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

h. Emission Limitation:

Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 6.18 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25 or 25A, as appropriate.

i. Emission Limitation:



Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 27.04 tons per year, as a rolling, 12-month summation of the VOC emissions.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation each month and then dividing by 2000 pounds per ton, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-months total emissions.

j. Emission Limitation:

The emissions of total organic HAP from Group 1 process vents shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3% oxygen.

Applicable Compliance Method:

The concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the RTO, shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18. The test methods and procedures selected shall be based on a reconsideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

k. Emission Limitation:

VOC emissions that are vented to the regenerative thermal oxidizer (RTO) shall be reduced by not less than 99%, by weight.

Applicable Compliance Method:

The concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the RTO, shall be determine in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18. The test methods and procedures selected shall be based on a reconsideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

[Authority for term: OAC rule 3745-31-05, 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, the emission testing for the regenerative thermal oxidizer (RTO) in accordance with the following requirements:

- a. Permit to install P0133285 for P001, required the permittee to submit to EPA for review and approval within 60 days of implementation of controls on Vessel 202-F, a Performance Test Protocol in accordance with EPA Methods and 40 CFR Part 63, Subparts F and G. The permittee submitted the Performance Test Protocol to USEPA for review and approval on January 7, 2026.
- b. The emission testing for the RTO serving emissions units P001, P007, and P009, shall be conducted by no later than 60 days following EPA approval of the Performance



Test Protocol to demonstrate compliance with the allowable VOC emission rate, the VOC control efficiency, and the HAP concentration (ppm) and/or HAP control efficiency, or within 3 months of the issuance of the Title V permit, whichever is earlier. The control efficiency is the percent reduction in mass emissions between the inlet and outlet of the control device.

- c. The emission testing shall be conducted to demonstrate compliance with the allowable VOC emission rate, the VOC control efficiency, and the HAP concentration (ppm) and/or HAP control efficiency. The control efficiency is the percent reduction in mass emissions between the inlet and outlet of the control device.
- d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for the hourly VOC emission limitation, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A;
 - ii. for the VOC control efficiency, U.E. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A; and
 - iii. for HAP concentration (ppm) and/or control efficiency, U.S. EPA Methods 1 through 4, and 18, 40 CFR Part 60, Appendix A.

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

- e. 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 Portsmouth Local Air Agency.
- f. The hourly VOC emission limitation and VOC control efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternate test protocol. 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.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameter, 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).
- h. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information as 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following the 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 Portsmouth Local Air Agency.

[Authority for term: 40 CFR Part 60, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

5. P008, Intermediates Finishing
Operations, Property and/or Equipment Description:

Intermediates Finishing with the following air pollution control devices: condenser (217-C), condenser (301-C), condenser 301-CA), condenser (351-C), and scrubber (310-L) / condenser (363-C).

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) PTI P0129556 issued 06/29/2026	The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subparts F, G, and H, 40 CFR Part 60, Subparts VV and/or VVa, 40 CFR Part 61, Subpart FF, and OAC rule 3745-21-09(DD).
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)a.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
d.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.



	this existing storage vessel source associated with the chemical manufacturing process	
e.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	See B.2.
f.	40 CFR Part 61, Subpart FF	See d)(2), e)(2) and B.7.
g.	40 CFR Part 60, Subpart VV and/or VVa	See B.2.
h.	OAC rule 3745-21-09(DD)	See B.2.

(2) Additional Terms and Conditions

- a. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F, G, and H.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or and external floating roof.

In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, these vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of permit issuance: 317-FR, 217-F, 301-FA, 321-FA, 321-FB, 350-FR, 330-F, 342-F, 227-F, and 310-LF.



Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

[Authority for term: 40 CFR Part 63, and 3745-77-07(A)(1)]

- (2) The CHP Hub shall be equipped with tightly solid covers in accordance with 40 CFR 63.149.

[Authority for term: 40 CFR Part 63, and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall use Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A for determination of the flow rate to demonstrate compliance with 40 CFR 60.660(c)(6).
- (2) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR 61.356, 40 CFR 63.356(a), and 61.356(b).
- (3) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
63.104(b), (d), and (e)	monitor the cooling water at the inlet and outlet of the Intermediates Finishing heat exchange system for the presence of cumene; on a quarterly basis, obtain three samples from the inlet and three samples from the outlet of the heat exchanger. Analyze the samples in accordance with the methods and procedures of Method 624 of 40 CFR Part 136, Appendix A. Results of the analysis shall be evaluated as specified in 40 CFR 63.104(b).
63.104(g), (h), (i), and (j)	On and after July 15, 2027, monitor for total strippable hydrocarbons in accordance with 63.104(g) and if a leak is detected, repair in accordance 63.104(h), (i), or (j) if repair is delayed.
63.104(f)(1) and (3)	heat exchanger record keeping requirements
63.105(a)	maintain procedures for management of maintenance wastewater by complying with 63.105(b) through (e). On and after July 15, 2027, 63.105(d) and (e) no longer apply.



[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (4) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.114(a)(5)	requirement to install recovery device or recapture device
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.115(e)	Except as provided in 63.113(a)(4), whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2.
63.115(g)	Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).
63.117 and 63.118(c), (d), (e), and (n)	records of process vent group determinations On or after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).
63.118(a)	record keeping requirements for process vent control devices



63.123(a), (f) and (h)	record keeping requirements for Group 2 storage tanks that elect to comply with 40 CFR 63.119(e)
63.147	record keeping requirements for Group 2 process wastewater streams
63.148(a)	comply with the leak inspection provisions of 63.148(b) through (j) for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) Except as specified in 63.113(a)(4), whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.
 - a. the recalculated TRE index value is less than or equal to 1.0;
 - b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
 - c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
 - d. the recalculated concentration is greater than or equal to 50 parts per million by volume.
- (2) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357(a)(1) through (a)(3).
- (3) The deviation reports shall be submitted in accordance with the requirements specified in the Standard Terms and Conditions of this permit.
- (4) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency, with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d) & (d)(1).
- (5) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air



Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
63.104(f)(2)	heat exchange system reporting requirements

- (6) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
63.152(c)	periodic reporting requirements including all information specified in 63.117 and 63.118 for process vents and as specified in 63.146 for process wastewater including reports of each excursion, (i.e. each period when a monitored parameter is outside the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv)
63.152(d)(1) [No longer applicable on or after July 15, 2027]]	Start-up, shutdown, malfunction reporting in accordance with 63.10(d)(5) and 63.152(d)(1)
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent reporting

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

None.

Applicable Compliance Method

None.

[Authority for term: 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

6. P009, Phenol WWT

Operations, Property and/or Equipment Description:

Phenol Wastewater Treatment Process controlled by the following air pollution control devices: condensers (2472-C, 2473-C) and the regenerative thermal oxidizer (RTO).

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0136454 issued 03/18/2026)	VOC emissions from all equipment except the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 191.89 pounds per day and 34.95 tons per year. Acetone emissions from all equipment except the RTO and fugitive equipment leaks, shall not exceed 23.72 pounds per day and 4.33 tons per year. Ammonia emissions from all equipment except the RTO and fugitive equipment leaks, shall not exceed 185.32 pounds per day and 33.82 tons per year. Total VOC emissions (including acetone) from the RTO, for all equipment vented to the RTO, shall not exceed 6.18 pounds per hour and 27.04 tons per year, as a rolling, 12-month summation from the RTO stack. Total particulate emissions from the RTO, for all equipment vented to the RTO, shall not exceed 0.68 pound per hour and 3.0 tons per year.



		Total NO_x emissions from the RTO, for all equipment vented to the RTO, shall not exceed 1.66 pounds per hour and 7.25 tons per year. Total CO emissions from the RTO, for all equipment vented to the RTO, shall not exceed 7.56 pounds per hour and 33.11 tons per year. See b)(2)a.
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)h.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
d.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123. See b)(2)b thru f.
e.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to	See B.2.



	this existing chemical manufacturing process unit.]	
f.	40 CFR Part 61, Subpart FF (40 CFR 61.340 – 61.358)	See d)(10), e)(4) and B.8.
g.	40 CFR Part 60, Subpart VV	See B.2.
h.	40 CFR Part 60, Subpart Kb	See b)(2)f.
i.	OAC rule 3745-21-09(DD)	See B.2.
j.	OAC rule 3745-18-06(E)	See b)(2)g.
k.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) (64.1 – 64.10) [In accordance with 40 CFR 64.2, this emissions unit is a major source of VOC emissions controlled with a catalytic oxidizer]	See b)(2)i, c)(2), d)(5), d(8), (d)(11), and d)(12).

(2) Additional Terms and Conditions

- a. In accordance with PTI 07-00451, issued 2/25/2008, Best Available Technology (BAT) was determined as the following: Condensers; Regenerative Thermal Oxidizer (RTO); Submerged fill or fixed roof process tanks shall be installed below the liquid level.

BAT for biological treatment units 2600-D and 2601-D are equivalent to the HON Subpart G MACT requirements.
- b. The permittee shall achieve the Required Mass Removal (RMR) as specified in 40 CFR 63.138(f) for Group 1 wastewater streams.
- c. For each wastewater tank that received, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of either 40 CFR 63.133(a)(1) or (a)(2) as specified in 40 CFR 63.133(a).
 - i. In accordance with the permittee's permit application and 40 CFR 63.133(a)(1), the following wastewater tanks shall be equipped with a fixed roof:
 - 401-F - wastewater collection tank
 - 2470-F - MHP feed surge tank
 - 2426-F - wastewater holding tank
 - 2427-F - wastewater holding tank
 - 2427-A - neutralization sump
 - 2428-F - biotreat feed tank (normal feed tank but other tanks can be used as necessary as the feed tank)
 - ii. In accordance with the permittee's permit application and 40 CFR 63.133(a)(2), the following wastewater tanks shall be equipped with a fixed

roof and a closed vent system which routes the hazardous air pollutant vapors vented from the tank to a control device:

Methyl hydroperoxide destruction reactor (2472-D) vented to the regenerative thermal oxidizer (RTO)

- d. At the time of permit issuance, the permittee does not use surface impoundments, containers, or oil-water separator to receive, manage, or treat Group 1 wastewater. If at any time the permittee uses a surface impoundment, container, or an oil-water separator to receive, manage, or treat a Group 1 wastewater, the permittee shall comply with the requirements for surface impoundments, containers, and oil-water separators as specified in 40 CFR 63.134, 40 CFR 63.135 and 40 CFR 63.137, except as provided in 40 CFR 63.132(a)(2) and 40 CFR 63.138(a). In accordance with 40 CFR 63.132(a)(2)(i)(C), beginning no later than July 15, 2027, the requirements of 63.132(a)(2)(i)(A) and 63.132(a)(2)(i)(B) no longer apply. Instead, pressure relief devices are subject to the requirements of 40 CFR 63.165(e) of Subpart H.
- e. The permittee shall comply with the applicable requirements for individual drain systems as specified in 40 CFR 63.136, except as provided in 40 CFR 63.132(a)(2) and 40 CFR 63.138(a). In accordance with 40 CFR 63.132(a)(2)(i)(C), beginning no later than July 15, 2027, the requirements of 63.132(a)(2)(i)(1) and 63.132(a)(2)(i)(2) no longer apply. Instead, pressure relief devices are subject to the requirements of 40 CFR 63.165(e) of Subpart H.
- f. The wastewater tanks are subject to the provisions of 40 CFR Part 60, Subpart Kb but are required to comply only with the requirements of 40 CFR Part 63, Subparts F, G, and H.
- g. The regenerative thermal oxidizer (RTO) is fueled with natural gas and process vent gas only and has no process weight as defined in OAC rule 3745-18-01(B)(13). Therefore, this equipment is exempt from the emission limitations established in OAC rule 3745-18-06(E).
- h. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.
- i. The requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) are applicable to the regenerative thermal oxidizer (2550-L). However, per 40 CFR 64.4(b)(4), monitoring included for standards exempt from this part pursuant to 64.2(b)(1)(i) or (vi) are presumptively acceptable as CAM to the extent such monitoring is applicable to the performance of the control device (and associated

capture system) for the pollutant-specific emissions unit. The monitoring is applicable to the control device since it is combustion zone temperature monitoring, which indicates proper operation with respect to both VOC and HAP emissions. Additionally, the HON MACT Subparts F, G, and H are covered by 64.2(b)(1)(i) since it is an "emission limitation or standard imposed by the Administrator after November 15, 1990, pursuant to section 112 of the [Clean Air] Act." Therefore, the HON required monitoring specified in section c)(2), d)(5), (d)(8), (d)(11), and (d)(12) below for this emissions unit and the regenerative thermal oxidizer (2550-L) is presumptively acceptable as CAM.

c) Operational Restrictions

- (1) In accordance with the permittee's permit application, the permittee is operating by treating the Group 1 wastewater streams in the enhanced biological treatment system (2601-D or 2600-D). The permittee has elected to measure the concentration of HAPs (Acetophenone, Cumene, and Methanol) at the influent and the effluent of the biological treatment system to fulfill the requirements of 40 CFR 63.143(c). The permittee shall ensure that the Actual Mass Removal (AMR) is greater than or equal to the Required Mass Removal (RMR) in accordance with the biological treatment unit (2601D / 2600-D) monitoring conducted per d)(1) thru d)(4) below.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (2) In accordance with the permittee's permit application, the permittee is operating by routing the hazardous organic air pollutant vapors from the methyl hydroperoxide destruction reactor (2472-D) to the regenerative thermal oxidizer.

The regenerative thermal oxidizer (RTO) shall meet the conditions specified below and in 40 CFR 63.139(c)(1):

- a. reduce the total organic compound emissions, less methane and ethane, or total organic HAPs emissions, vented to the control device by 95 percent, by weight, or greater, or
- b. achieve an outlet total organic compound concentration, less methane and ethane, or total organic HAPs concentration of 20 ppmv on a dry basis corrected to 3% oxygen; or
- c. provide a minimum residence time of 0.5 second at a minimum temperature of 760 degrees Celsius.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (3) The permittee shall not operate biological treatment units 2600-D and 2601-D at the same time except for limited periods of time such as when wastewater is being diverted from one unit to another and when repopulating the biomass.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall measure the flow at the inlet and/or outlet of the Wastewater Treatment Plant (WWTP) to be used to determine the Actual Mass Removal (AMR) of the WWTP system in accordance with 40 CFR section 63.145(f)(2).

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (2) The permittee shall collect weekly samples at the inlet and effluent of WWTP basins (2601-D and/or 2600-D). Each sample shall be analyzed to measure the concentration of the Group 1 HAPs (Acetophenone, Cumene, and Methanol) via a direct injection Gas Chromatograph per EPA method for Wastes under USEPA SW-846 Method 801fC or alternate approved equivalent method.
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (3) The permittee shall calculate the Required Mass Removal (RMR) using the individual HAP concentrations at the influent of the treatment plant on the day of analysis using the calculation specified in 40 CFR section 63.145(f)(3) and (f)(4). The influent and effluent data shall be utilized to calculate the AMR according to 63.145(f)(5)(i).
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (4) If the AMR is not met, the permittee shall conduct daily sampling, analysis, and calculation of the AMR until the results return to compliance for two consecutive days.
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (5) The permittee shall maintain a temperature monitoring device, equipped with a continuous recorder, in the firebox of the regenerative thermal oxidizer (RTO) in accordance with the requirements of 40 CFR 63.114(a).
- The permittee shall maintain records of the regenerative thermal oxidizer (RTO) firebox temperature in accordance with 40 CFR 63.147(d).
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (6) The permittee shall perform semiannual visual inspections of the wastewater tanks that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, in accordance with 40 CFR 63.143(a).
- Records of the wastewater tank inspections shall be maintained in accordance with 40 CFR 63.147.
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (7) For individual drain systems used to receive, manage, or treat Group 1 wastewater, the permittee shall comply with the monitoring requirements of 40 CFR 63.143(a).
- The permittee shall maintain records of the individual drain system inspections in accordance with 40 CFR 63.147.
- [Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]
- (8) The permittee shall monitor any bypass line(s) that could divert a vent stream from the methyl hydroperoxide destruction reactor (2472-D) away from the regenerative thermal oxidizer (RTO) in accordance with 40 CFR Subpart G, Table 13:
- Properly maintain and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR Part 63, Subpart G, Table 13. The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or
 - Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

The permittee shall maintain records of the flow indicator or monthly visual inspection requirements for bypass lines that could divert a vent stream from the methyl hydroperoxide destruction reactor (2472-D) away from the regenerative thermal oxidizer (RTO) in accordance with 40 CFR 63.147.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (9) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105(a).

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (10) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR 61.356.

[Authority for term: 40 CFR Part 61, and 3745-77-07(C)(1)]

- (11) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (12) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.114(a)	requirement to install catalyst bed temperature monitoring devices
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 49 CFR 63.119(e)
63.148(a)	leak inspection provisions for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures



63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63[No longer applicable on or after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process wastewater, including each excursion, (i.e. each reports of period when a monitored parameter is outside the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv).

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (2) The permittee shall submit semi-annual reports in accordance with the requirements of 40 CFR Part 63 section 63.146(d)(1) which summarize the results of measurements of days when the AMR was less than the RMR which includes the identification of the biological treatment unit, the parameter that was out of range, and the date the parameter is out of range. Also include the date and time of the sampling, the concentrations of the Group 1 HAPs taken at the influent and effluent of the WWTP, and the calculations for the AMR, including the flow rates utilized.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (3) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5).). On and after July 15, 2027, the requirement submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5) no longer applies.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (4) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357 and section B.7 of the Facility Specific Terms and Conditions.

[Authority for term: 40 CFR Part 61, and 3745-77-07(C)(1)]

- (5) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency, with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d) & (d)(1).

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (6) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air



Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

- (7) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027)]	process vent reporting

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. **Emissions Limitation**

VOC emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 191.89 pounds per day.

VOC emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 34.95 tons per year.

Acetone emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 23.72 pounds per day.

Acetone emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 4.33 tons per year.

Ammonia emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 185.32 pounds per day.

Ammonia emissions from all equipment except for the regenerative thermal oxidizer (RTO) and fugitive equipment leaks shall not exceed 33.82 tons per year.

Applicable Compliance Method

The VOC and acetone emissions (potential to emit) from the equipment listed below shall be summed. The Acetone emissions (potential to emit) from the equipment listed below shall be summed. The Ammonia emissions (potential to emit) from the equipment listed below shall be summed.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Equipment ID	Equipment Description	Egress Point	Control Device	VOC (lb/day)	VOC (tpy)	Acetone (lb/day)	Acetone (tpy)	NH3 (tpy)	NH3 (tpy)	Notes
2421-A	Oily waste sump	WP01	None	0.19	0	0.2	0.04	0	0	2
2426-F	Wastewater holding tank	WP02	None	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	2
2427-F	Wastewater holding tank	WP03	None	45.28	8.26	9.66	1.76	0	0	2
2428-F	Biotreat feed tank	WP04	None	24.16	4.41	7.39	1.35	0	0	2
2427-A	Neutralization sump	WP06	None	23	4.2	4.9	0.89	0	0	2
2428-A	Wastewater sump	WP11	None	0.13	0	<0.01	<0.01	0	0	2
2600-D	Biological treatment unit	WP14	None	82.86	15.1	1.21	0.22	0.44	0.08	2
2601-D	Biological treatment unit	WP-58								
401-F	Process wastewater collection tank	WP15	None	3.6	0.66	0	0	0	0	2
2470-F	MHP feed surge tank	WP16	2473-C condenser			0	0	0	0	1
2439-F	Storm water tank	WP50	None	2.27	0.41	0	0	18.55	3.39	2
2440-F	Storm water tank	WP51	None	0.7	0.13	0	0	69.86	12.75	2
2441-F	Storm water tank	WP52	None	3.45	0.63	0	0	96.44	17.6	2
2242-F	Storm water tank	WP53	None	3.81	0.7	0	0	0	0	2
2201-A	Storm water diversion sump	WP54	None	2.44	0.45	0	0	0	0	2

- VOC, acetone, and ammonia emissions (lb/hr and tpy) from this equipment are controlled. The VOC, acetone and ammonia emissions include the emissions reductions due to the control device. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00451). Individual equipment VOC, acetone, and ammonia (lb/hr and tpy) values are not independently enforceable in this permit.
- VOC, acetone, and ammonia emissions (lb/hr and tpy) from this equipment are uncontrolled. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00451). Individual equipment VOC, acetone, and ammonia (lb/hr and tpy) values are not independently enforceable in this permit.

a. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 0.68 pound per hour.



Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

b. Emission Limitation:

Total particulate emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 3.0 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

c. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 1.66 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

d. Emission Limitation:

Total NO_x emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.25 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

e. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 7.56 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

f. Emission Limitation:

Total CO emissions from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 33.11 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton.



Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

g. Emission Limitation:

Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 6.18 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25 or 25A, as appropriate.

h. Emission Limitation:

Total VOC emissions (including acetone) from the regenerative thermal oxidizer (RTO), of all equipment vented to the RTO, shall not exceed 27.04 tons per year, as a rolling, 12-month summation of the VOC emissions.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation each month and then dividing by 2000 pounds per ton, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-months total emissions.

i. Emission Limitation:

The permittee shall achieve the Required Mass Removal (RMR) of Table 9 compounds for Group 1 wastewater streams.

Applicable Compliance Method:

The permittee shall demonstrate that the actual mass removal (AMR) is greater than or equal to the RMR. The RMR and AMR shall be calculated in accordance with the equations and procedures in 40 CFR 63.145(f).

j. Emission Limitation:

Reduce the total organic compound emissions, less methane and ethane, or total organic HAPs emissions vented from the methyl hydroperoxide destruction reactor (2472-D) to the regenerative thermal oxidizer by 95 percent, by weight, or greater; or

Achieve total organic compound concentration, less methane and ethane, or total organic HAPs concentration of 20 ppmv on a dry basis corrected to 3% oxygen at the outlet of the regenerative thermal oxidizer.

k. Applicable Compliance Method:

In accordance with 40 CFR 63.145(i), the concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the regenerative thermal oxidizer (RTO) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A. The test methods and procedures selected shall be based on a reconsideration of the diversity of the organic species present and their

total concentration, and on a consideration of the potential presence of interfering gases.

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 63, and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, the emission testing for the regenerative thermal oxidizer (RTO) in accordance with the following requirements:
- a. Permit to install P0133285 for P001 required the permittee to submit to EPA for review and approval within 60 days of implementation of controls on Vessel 202-F, a Performance Test Protocol in accordance with EPA Methods and 40 CFR Part 63, Subparts F and G. The permittee submitted the Performance Test Protocol to USEPA for review and approval on January 7, 2026.
 - b. The emission testing for the RTO serving emissions units P001, P007, and P009, shall be conducted by no later than 60 days following EPA approval of the Performance Test Protocol to demonstrate compliance with the allowable VOC emission rate, the VOC control efficiency, and the HAP concentration (ppm) and/or HAP control efficiency, or within 3 months of the issuance of the Title V permit, whichever is earlier. The control efficiency is the percent reduction in mass emissions between the inlet and outlet of the control device.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for the hourly VOC emission limitation, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A;
 - ii. for the VOC control efficiency, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A; and
 - iii. for HAP concentration (ppm) and/or control efficiency, U.S. EPA Methods 1 through 4, and 18, 40 CFR Part 60, Appendix A.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - 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 Portsmouth Local Air Agency.
 - e. The hourly VOC emission limitation and VOC control efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternate test protocol. 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.
 - f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameter, 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

- g. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information as 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following the 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 Portsmouth Local Air Agency.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

7. P012, Phenol III Process Unit

Operations, Property and/or Equipment Description:

Phenol III Process Unit with the following air pollution control devices: condenser (4251-C), condenser (4711-C), condenser (4712-C), scrubber (4710-E), and catalytic oxidizer (4230-L).

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI 07-00451 issued 2/25/2008)	Volatile organic compound (VOC) emissions from the catalytic oxidizer (4230-L) shall not exceed 69.26 pounds per day and 12.64 tons per year. Acetone emissions from the catalytic oxidizer (4230-L) shall not exceed 4.93 pounds per day and 0.90 ton per year. Nitrogen oxides (NO_x) emissions from the catalytic oxidizer (4230-L) shall not exceed 41.32 pounds per day and 7.54 tons per year. Acetone emissions from the acetone rundown tanks (4312-FA and 4312-FB) shall not exceed 4.32 tons per year. Negligible emissions of particulate, particulate less than ten microns and sulfur dioxide (SO₂) from the catalytic oxidizer (4230-L). See b)(2)a.
b.	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	VOC emissions shall be reduced by 99%.
c.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)k.
d.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109)	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.



	[in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	
e.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.
f.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	See B.2.
g.	40 CFR Part 60, Subpart NNN	See b)(2)d.
h.	40 CFR Part 60, Subpart III (40 CFR 60.610 – 60.618) [In accordance with 40 CFR 60.610(a)(2), this emissions unit is comprised of an air oxidation reactor with a recovery system constructed after October 21, 1983 that produces a chemical listed in 40 CFR 60.617.]	Except as otherwise allowed, the permittee shall reduce emissions of TOC (minus methane and ethane) by 98 weight-percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen, whichever is less stringent. See b)(2)e.
i.	40 CFR Part 60, Subpart Kb	See b)(2)f.
j.	40 CFR Part 61, Subpart VV	See B.2.
k.	OAC rule 3745-21-09(DD)	See B.2.
l.	OAC rule 3745-21-09(EE)	See b)(2)g. and b)(2)h.
m.	OAC rule 3745-18-06	See b)(2)i.
n.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) (64.1 – 64.10)	See b)(2)l., c)(1), d)(2), d)(3), d)(15), and d)(16).



	[In accordance with 40 CFR 64.2, this emissions unit is a major source of VOC emissions controlled with a catalytic oxidizer]	
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(2) Additional Terms and Conditions

- a. BAT Determination: spent air catalytic incinerator with low-NO_x burner and compliance with 40 CFR Part 63, Subparts A, F, G, and H as applicable for new sources.
- b. In accordance with 40 CFR 63.113(a)(2), (a)(2)(i), and (a)(2)(ii), for all Group 1 process vent streams, the emissions of total organic HAPs shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3% oxygen.
- c. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of either 40 CFR 63.133(a)(1) or (a)(2) as specified in 40 CFR 63.133(a).
 - i. In accordance with the permittee's permit application and 40 CFR 63.133(a)(1), the following wastewater tanks shall be equipped with a fixed roof:
4630-F dephenolization purge drum
 - ii. In accordance with the permittee's permit application and 40 CFR 63.133(a)(2), the following wastewater tanks shall be equipped with a fixed roof and a closed vent system which routes the hazardous air pollutant vapors vented from the tank to a control device:
MHP decomposer (4272-D) vented to a catalytic oxidizer (4230-L)
- d. The following distillation units and associated recovery equipment are subject to the provisions of 40 CFR Part 60, Subpart NNN but are required to comply only with 40 CFR Part 63, Subparts F and G as process vents with the designated group determinations, per 40 CFR 63.110(d)(10):

Egress Point	Distillation Column (equipment number)	Group
P301	Primary Cumene Stripper (4202-E)	1
P301	Secondary Cumene Stripper (4203-E)	1
P301	Acetone Product Column System (4301-E, 4610-E, and 4302-E)	2
P301	Crude Phenol Column (4304-E)	2
P301	Hydrocarbon Removal Column (4305-E)	2
P301	Phenol Finishing Column (4307-E)	2

- e. The following equipment is subject to the provisions of 40 CFR Part 60, Subpart III but are required to comply only with the terms and conditions of 40 CFR Part 63, Subparts F, G, and H:
Air oxidation reactor train and its combined vent stream (4201-DA, 4201-DB, 4201-DC), and Oxidation Process Surge Drum (4208-F).



- f. The Group 2 storage vessels within this process unit are subject to the provisions of 40 CFR Part 60, Subpart Kb but are required to comply only with 40 CFR Part 63, Subparts F, G, and H.
- g. Except where exempted under OAC rule 3745-21-09(EE)(2), the permittee shall vent process vent streams from air oxidation processes, producing a chemical listed in Appendix A of OAC rule 3745-21-09, to a combustion device which:
 - i. reduces the VOC emissions vented to it with an efficiency of at least 98 percent, by weight; or
 - ii. emits a VOC concentration less than 20 ppm by volume, dry basis.
- h. Any process vent stream or combination of process vent streams which maintain a TRE of greater than 1.0 shall be exempt from the requirements of OAC rule 3745-21-09(EE)(1). If an oxidation process has more than one process vent stream, the TRE shall be based upon a combination of the process vent streams. The TRE shall be calculated in accordance with OAC rule 3745-21-09(EE)(3).
- i. The catalytic oxidizer (4230-L) is fueled with natural gas and process vent gas only and has no process weight as defined in OAC rule 3745-18-01(B)(13). Therefore, this equipment is exempt from the emission limitation established in OAC rule 3745-18-06(E).
- j. There are negligible particulate emissions from the Phenol III process unit; therefore, OAC rules 3745-17-07(A) and 3745-17-11 are not applicable to the Phenol III process unit.
- k. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F, G, and H.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.
- l. The requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) are applicable to the catalytic oxidizer (4230-L). However, per 40 CFR 64.4(b)(4), monitoring included for standards exempt from this part pursuant to 64.2(b)(1)(i) or (vi) are presumptively acceptable as CAM to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the pollutant-specific emissions unit. The monitoring is applicable to the control device since it is combustion zone temperature monitoring, which indicates proper operation with respect to both VOC and HAP emissions. Additionally, the HON MACT Subparts F, G, and H are covered by 64.2(b)(1)(i) since it is an "emission limitation or standard imposed by the Administrator after November 15, 1990, pursuant to section

112 of the [Clean Air] Act.” Therefore, the HON required monitoring specified in section c)(1), d)(2), d)(3), d)(15), and d)(16) below for this emissions unit and the catalytic oxidizer (4230-L) is presumptively acceptable as CAM.

c) Operational Restrictions

- (1) In accordance with the permittee’s permit application, the permittee is operating by routing the organic vapors from Group 1 process vents from the Phenol III process unit (emissions unit P012) to a catalytic oxidizer (4230-L) in order to comply with the percent reduction requirement or concentration limit specified in 40 CFR 63.113(a)(2), (a)(2)(i), and (a)(2)(ii).

In accordance with the permittee’s permit application, the permittee is operating by routing the hazardous organic air pollutant vapors from the MHP Decomposer (4272-D) to the catalytic oxidizer (4230-L) in order to comply with the percent reduction requirement, concentration limit, or residence time requirement specified in 40 CFR 63.139(c)(1).

The minimum temperature of gases at the inlet of the catalyst bed shall be at or above 752 degrees Fahrenheit (400 degrees Celsius) calculated on a daily average.

The minimum temperature difference of the gases across the catalyst bed shall be at or above 49 degrees Fahrenheit (9.44 degrees Celsius) calculated on a daily average.

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (2) The permittee shall burn only process vent gases and/or natural gas in the catalytic oxidizer (4230-L).

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (3) The Phenol III Hub and the CHP Hub shall be equipped with tightly fitting solid covers in accordance with 40 CFR 63.149.

[Authority for term: 40 CFR Part 63 and 3745-77-07(A)(1)]

- (4) The crude AMS surge tank (4505-F) is a bottoms receiver tank with a capacity of 868.8 cubic meters, containing material with a maximum true organic HAP vapor pressure of 0.225 psia at operating temperature, and the organic vapors vented from the tank are not vented back to the process. Therefore, the bottoms receiver tank shall be vented to a control device that complies with the requirements of 40 CFR 63.172.

In accordance with the permittee’s permit application, the permittee is operating by routing the organic vapors from the surge control vessel (4505-F) to the catalytic oxidizer (4230-L). Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with 40 CFR Part 63, Subpart H, such system or control device shall be operating.

The catalytic oxidizer (4230-L) shall be designed and operated to reduce the organic HAP emissions or volatile organic compound emissions vented to it with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume on a dry basis corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 second at a minimum temperature of 760 degrees Celsius.

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (5) Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR Part 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.



In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, these vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of initial permit issuance: 4202-F, 4213-F, 4214-F, 4301-F, 4330-F, 4337-F, 4338-F, 4339-F, 4342-F, 4373-F, 4620-F, 4640-F, and 4721-F.

Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall monitor the closed vent system which routes the organic vapors from the crude AMS surge control vessel (4505-F) to the catalytic oxidizer (4230-L) in accordance with 40 CFR 63.172(f), 40 CFR 63.172(h), (h)(1), & (h)(2), 40 CFR 63.172(i), 40 CFR 63.172(j), 40 CFR 63.172(k), and 40 CFR 63.172(l), (l)(1), & (l)(2).

The permittee shall monitor the catalytic oxidizer (4230-L) to ensure that it is operated and maintained in conformance with its design as required by 40 CFR 63.172(e).

In accordance with 40 CFR 63.172(j)(4)(i), the use of a bypass line at any time on a closed vent system (used to comply with the provisions of 40 CFR Part 63, Subpart H) to divert emissions to the atmosphere or to a control device not meeting the requirements specified in Subpart H is an emissions standards violation.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (2) The permittee shall maintain temperature monitoring devices, equipped with continuous recorders, immediately before and after the catalyst bed of the catalytic oxidizer (4230-L) in accordance with the requirements of 40 CFR 63.114(a) and 40 CFR 63.143(e).

The permittee shall maintain records of the temperature immediately prior to the catalyst bed, immediately after the catalyst bed, and the temperature difference across the catalyst bed in accordance with 40 CFR 63.118(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) The permittee shall monitor any bypass line(s) that could divert a Group 1 process vent or vent stream away from the MHP Destructor (4272-D) away from the catalytic oxidizer (4230-L) in accordance with 40 CFR 63.114(d)(1), (2), and (3), and 40 CFR 63.143(e). Prior to July 15, 2027, equipment such as leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to 40 CFR 63.114(d). Beginning no later than July 15, 2027, equipment not subject to 63.114(d) is identified in 63.114(d)(3)(ii).

- a. Properly maintain and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR 63.118(a)(3). Beginning July 15, 2027, records shall also include the information in 40 CFR



63.118(a)(5). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

- b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
- c. Beginning July 15, 2027, the use of a bypass line at any time on a closed vent system to divert emissions (subject to the limitations in 63.112) to the atmosphere or to a control device not meeting the requirements specified in this subpart, is an emissions violation.

The permittee shall maintain records of the flow indicator or monthly visual inspection requirements for bypass lines that could divert a Group 1 process vent or vent stream away from the MHP Destructor (4272-D) away from the catalytic oxidizer (4230-L) in accordance with 40 CFR 63.118(a)(3), 40 CFR 63.118(a)(4) and 40 CFR 63.147.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) Prior to July 15, 2027, whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with 40 CFR 63.115(e).

The permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.117, 63.118(c), (d), and (e).

Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).

On or after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (5) For each Group 2 storage vessel, the permittee shall comply with the record keeping requirements of 40 CFR 63.123(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (6) For each Group 1 process wastewater stream, the permittee shall comply with the record keeping requirements of 40 CFR 63.132 through 40 CFR 63.149.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (7) The permittee shall perform semiannual visual inspections of the wastewater tanks that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream in accordance with 40 CFR 63.143(a). Records of the wastewater tank inspections shall be maintained in accordance with 40 CFR 63.147.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (8) For each Group 2 process wastewater stream, the permittee shall comply with the record keeping requirements of 40 CFR 63.147.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (9) The permittee shall monitor the cooling water at the inlet and outlet of the Phenol III heat exchange system for the presence of cumene and phenol in accordance with 40 CFR 63.104(b), (d), and (e). On a quarterly basis, the permittee shall obtain three samples from the inlet and three samples from the outlet of the heat exchanger. The permittee shall analyze the samples in accordance with the methods and procedures of Method 624 and 625 of 40 CFR Part 136, Appendix A. The results of the analysis shall be evaluated as specified in 40 CFR 63.104(b)(6).

The permittee shall maintain heat exchange records in accordance with 40 CFR 63.104(f)(1).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (10) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (11) For each day during which the permittee burns a fuel other than process vent gases and/or natural gas in the catalytic oxidizer (4230-L), the permittee shall maintain a record of the type and quantity of fuel burned.

[Authority for term: OAC rules 3745-15-03(A) and 3745-77-07(C)(1)]

- (12) The total resource effectiveness value for an air oxidation process shall be calculated in accordance with the following equations:

- a. For non-chlorinated process vent streams with a net heating value less than or equal to 3.6 and for all chlorinated process vent streams:

$$TRE = [a + bW^{.88} + cW + dWH + eW^{.88} H^{.88} + fW^{.5}] / E$$

where:

TRE = total resource effectiveness value;

E = maximum hourly VOC emission rate at the vent stream design flow rate (W), in kilograms of VOC per hour (kg/hr);

W = vent stream design flow rate at a standard temperature of twenty degrees Celsius, in standard cubic meters per minute (scm/min);

H = vent stream net heating value, as determined in accordance with OAC rule 3745-21-10(P)(2), in megajoules per standard cubic meter (10^6 J/scm); and

a, b, c, d, e, and f = applicable coefficients from Appendix B of OAC rule 3745-21-09.

- b. For non-chlorinated process vent streams with a net heating value greater than 3.6:

$$TRE = [a + bW^{.88} + cW + dWH + eW^{.88} H^{.88} + f(WH / 3.6)^{.5}] / E$$

where TRE, E, W, H, a, b, c, d, e, and f are defined as above.

[Authority for term: OAC rules 3745-21-09(E) and 3745-77-07(C)(1)]

- (13) The parameters used in the total resource effectiveness equations required by OAC rule 3745-21-09(E)(3) shall be measured at the outlet(s) of the final product recovery device(s) where VOC is reclaimed for beneficial reuse (recycle, sale or use in another part of the process).

[Authority for term: OAC rules 3745-21-09(E) and 3745-77-07(C)(1)]



- (14) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR Part 61.356 and section B.7 of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61 and OAC rule 3745-77-07(C)(1)]

- (15) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (16) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.114(a)	requirement to install catalyst bed temperature monitoring devices
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 49 CFR 63.119(e)
63.148(a)	leak inspection provisions for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process

wastewater, including reports of each excursion, (i.e. each period when a monitored parameter is outside of the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv).

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5). On and after July 15, 2027, the requirement submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5) no longer applies.

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (3) Except as specified in 63.113(a)(4), whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.

- a. the recalculated TRE index value is less than or equal to 1.0;
- b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
- c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
- d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (4) For each heat exchange system, the permittee shall comply with the reporting requirements of 40 CFR 63.104(f)(2).

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall submit reports of any fuels burned in the catalytic oxidizer (4230-L) other than process vent gases and/or natural gas within thirty (30) days to the Portsmouth Local Air Agency, including the date, type, and amount of any such fuel burned.

[Authority for term: OAC rules 3745-15-03(A) and 3745-77-07(C)(1)]

- (6) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357(a)(1) through (a)(3).

[Authority for term: 40 CFR Part 61 and OAC rule 3745-77-07(C)(1)]

- (7) Reports required by 40 CFR Part 63, Subparts F, G, and H shall be submitted to the Portsmouth Local Air Agency, with a copy to USEPA, Region 5, in accordance with 40 CFR 63.103(d) & (d)(1).

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air



Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027)]	process vent reporting

[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions from the catalytic oxidizer (4230-L) shall not exceed 69.26 pounds per day.

Applicable Compliance Method

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25, or 25A.

b. Emissions Limitation

VOC emissions from the catalytic oxidizer (4230-L) shall not exceed 12.64 tons per year

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the allowable daily emission limitation by 365 days per year and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the daily emission limitation is maintained.

c. Emissions Limitation

Acetone emissions from the catalytic oxidizer (4230-L) shall not exceed 4.93 pounds per day

Applicable Compliance Method

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18.

d. Emissions Limitation



Acetone emissions from the catalytic oxidizer (4230-L) shall not exceed 0.90 ton per year

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the allowable daily emission limitation by 365 days per year, and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the daily emission limitation is maintained.

e. Emissions Limitation

NO_x emissions from the catalytic oxidizer (4230-L) shall not exceed 41.32 pounds per day

Applicable Compliance Method

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7e.

f. Emissions Limitation

NO_x emissions from the catalytic oxidizer (4230-L) shall not exceed 7.54 tons per year

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the allowable daily emission limitation by 365 days per year and then dividing by 2,000 pounds per ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the daily emission limitation is maintained.

g. Emissions Limitation

Negligible emissions of particulate, particulate less than 10 microns and SO₂ from the catalytic oxidizer (4230-L)

Applicable Compliance Method

The emission rates of particulates, particulates less than 10 microns, and SO₂ are negligible as long as only natural gas is burned as fuel in the catalytic oxidizer 4230-L).

h. Emissions Limitation

Acetone emissions from the acetone rundown tanks (4312-FA and 4312-FB) shall be less than 4.32 tons per year.

Applicable Compliance Method

The acetone emissions (the potential to emit) from the equipment as listed below shall be summed.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18.

Equipment ID	Equipment Description	Egress Point	Control Device	Acetone (lb/day)	Acetone (tpy)	Notes
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4312-FA	Acetone tank	rundown	P302	Internal floating roof	11.82	2.16	1
4312-FB	Acetone tank	rundown	P303	Internal floating roof	11.82	2.16	1

Acetone emissions (lb/day and tpy) from this equipment are controlled. The acetone emissions include the emissions reductions due to the control device. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00451). Individual equipment acetone (lb/day and tpy) values are not independently enforceable in this permit.

i. Emissions Limitation

VOC emissions from all equipment vented to the catalytic oxidizer (4230-L) shall be reduced by 99%

Applicable Compliance Method

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the catalytic oxidizer (4230-L) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25 or 25A. The test methods and procedures selected shall be based upon 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.

j. Emissions Limitation

The emissions of total organic compounds, less methane and ethane, or total organic HAPs from the MHP Decomposer (4272-D) shall be reduced by 95 weight-percent or to a concentration of 20 parts per million by volume on a dry basis corrected to 3 percent oxygen, whichever is less stringent.

Applicable Compliance Method

The concentration (ppm) and/or control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the catalytic oxidizer (4230-L)) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A. The test methods and procedures selected shall be based on a reconsideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 63, and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, the emission testing for the catalytic oxidizer (4230-L) in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months of issuance of the Title V permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable VOC emission rate, the VOC control efficiency, and the HAP concentration

(ppm) and/or HAP control efficiency. The control efficiency is the percent reduction in mass emissions between the inlet and outlet of the control device.

- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for the hourly VOC emission limitation, U.S. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A;
 - ii. for the VOC control efficiency, U.E. EPA Methods 1 through 4, and 18, 25, or 25A, 40 CFR Part 60, Appendix A; and
 - iii. for HAP concentration (ppm) and/or control efficiency, U.S. EPA Methods 1 through 4, and 18, 40 CFR Part 60, Appendix A.

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

- 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 Portsmouth Local Air Agency.
- e. The hourly VOC emission limitation and VOC control efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternate test protocol. 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.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameter, 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).
- g. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information as 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following the 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 Portsmouth Local Air Agency.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

g) **Miscellaneous Requirements**

- (1) None.

8. P013, AMS Distillation Process Unit

Operations, Property and/or Equipment Description:

AMS distillation process unit

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0133285 issued 10/16/25)	Total VOC (including acetone) emissions from all equipment except for the fugitive equipment leaks shall not exceed 60.45 pounds per day and 11.03 tons per year, as a 12-month rolling summation. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20, 40 CFR Part 63, Subparts F, G, and H, 40 CFR Part 60, Subparts VV and NNN, 40 CFR Part 61, Subpart FF and OAC rule 3745-21-09(DD).
b.	OAC rule 3745-31-10 through 20	Total VOC (including acetone) emissions from all modified equipment (including egress points AMS223 and AMS224) except for the fugitive equipment leaks shall not exceed 14.6 pounds per day and 2.66 tons per year, as a 12-month rolling summation. See b)(2)a.
c.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)f.
d.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.



e.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.
f.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing chemical manufacturing process unit.]	See B.2.
g.	40 CFR Part 60, Subpart VV	See B.2.
h.	OAC rule 3745-21-09(DD)	See B.2.
i.	40 CFR Part 60, Subpart NNN	See b)(2)b. thru b)(2)e.
j.	40 CFR Part 61, Subpart FF	See B.7.

(2) Additional Terms and Conditions

- a. These Prevention of Significant Deterioration (PSD) best available control technology (BACT) determinations for process vent emissions from the AMS topping column (3501-E) and the AMS tailing column (3502-E) require maintaining existing operating conditions and do not require additional control.

The PSD BACT determination for fugitive emissions from the AMS Distillation process unit requires compliance with the leak detection and repair program required by 40 CFR Part 63, Subpart H.

- b. The requirements of 40 CFR Part 60, Subpart NNN apply to the following distillation units and associated recovery equipment within the AMS Distillation process unit:

Egress Point	Distillation Column (equipment number)
AMSP223	AMS Super Topper (3500-E) & AMS Topping Column (3501-F)
AMSP224	AMS Tailing Column (3502-E)

- c. In accordance with 40 CFR 60.660(c)(4), equipment subject to 40 CFR Part 60, Subpart NNN with a total resource effectiveness (TRE) index value of greater than 8.0 are exempt from the requirements of 40 CFR Part 60, Subpart NNN except for the requirements specified in 60.662, 60.664(e), 60.664(f), 60.664(g), 60.665(h) and



60.665(l). According to the permittee's permit application, the following distillation columns have a TRE index value greater than 8.0: 3500-E.

- d. In accordance with 40 CFR 60.660(c)(6), the equipment subject to 40 CFR Part 60, Subpart NNN with a vent stream flow rate less than 0.008 standard cubic meters per minute (scm/min) are exempt from the requirements of 40 CFR Part 60 Subpart NNN except for the requirements specified in 60.664(h) and 60.665(i), 60.665(l)(5), and 60.665(o). At the time of permit issuance, the following distillation columns have a flow rate less than 0.008 standard cubic meters per minute: 3502-E.
- e. In accordance with 40 CFR 60.662, equipment subject to 40 CFR Part 60, Subpart NNN with a TRE index equal to or less than 8.0 and a flow rate equal to or greater than 0.008 standard cubic meters per minute (scm/min) shall comply with one of the following:
 - i. Reduce the emissions of total organic compound (TOC) by 98% by weight or to a concentration of 20 ppmv TOC, on a dry basis corrected to 3% oxygen;
 - ii. Combust the emissions in a flare that meets the requirements of 40 CFR 60.18; or
 - iii. Maintain a TRE index value greater than 1.0 without the use of VOC emission control devices.
- f. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) Prior to July 15, 2027, each surge control vessel or bottoms receiver tank which meets one of the conditions listed in 40 CFR Part 63.170(a) shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of 40 CFR 63.172 or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.

In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks did not exceed the threshold triggers of 40 CFR 63.170 at the time of application submittal. Therefore, these vessels were not required to meet the conditions listed in 40 CFR 63.170 at the time of initial permit issuance: 3505-F, 3507-FA, 3507-FB, 314-FA, 351-F.

Due to U.S. EPA revisions of the HON rules and in accordance with 40 CFR 63.170(b), on or after July 15, 2027, 40 CFR 63.170(a) no longer applies. Instead, each surge control vessel and bottoms receiver that is not routed back to the process and emits greater than or equal to 1.0 lb/hr of total organic HAP, must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 63.172, except as provided in 63.162(b), or comply with the requirements of 63.113(a)(1) or (a)(2).

[Authority for term: 40 CFR Part 63, OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) Prior to July 15, 2027, whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with 40 CFR 63.115(e).

The permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.117, 63.118(c), (d), and (e).

Due to U.S. EPA revisions of the HON rules, a new definition of Group 1 and Group 2 process vents will take effect on July 15, 2027. On and after July 15, 2027, a Group 1 process vent means a process vent that emits greater than or equal to 1.0 lb/hr of total organic HAP, and a Group 2 process vent means a process vent that emits less than 1.0 lb/hr of total organic HAP, to be determined in accordance with 40 CFR 63.115(g).

On or after July 15, 2027, the permittee shall maintain records of process vent group determinations in accordance with 40 CFR 63.118(n).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (2) For each Group 2 storage vessel that elect to comply with 40 CFR 63.119(e), the permittee shall comply with the record keeping requirements of 40 CFR 63.123(a).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) For each Group 2 process wastewater stream, the permittee shall comply with the record keeping requirements of 40 CFR 63.147.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) The permittee shall maintain procedures for the management of maintenance wastewater in accordance with 40 CFR 63.105.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (5) In accordance with 40 CFR 60.664(e), the net heating value of the gas combusted for determining the process vent stream TRE index value to determine compliance under 40 CFR 60.662(c) shall be determined in accordance with the equations and procedures in 40 CFR 60.664(e)(1) or (e)(2).

[Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]

- (6) For purposes of complying with 40 CFR 60.662(c), the permittee shall comply with 60.664(f) and determine the TRE index value by calculating values using both the incinerator equation in 40 CFR 60.664(f)(1) and the flare equation in 40 CFR 60.664(f)(2) and selecting the lower of the two values.

[Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]



- (7) In accordance with 40 CFR 60.664(g), the permittee seeking to comply with 40 CFR 60.660(c)(4) or 40 CFR 60.662(c) shall recalculate the TRE index value for that affected facility whenever process changes are made. Examples of process changes include changes in production capacity, feedstock type, or catalyst type, or whenever there is replacement, removal or addition of recovery equipment. The TRE index value shall be recalculated based on test data, or on best engineering estimates of the effects of the change to the recovery system.
- a. Where the recalculated TRE index value is less than or equal to 1.0, the permittee shall notify the Administrator, with a copy to the Portsmouth Local Air Agency, within 1 week of the recalculation and shall conduct a performance test according to the methods and procedures required by 40 CFR 60.664 in order to determine compliance with 40 CFR 60.662(a). Performance tests shall be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.
 - b. When the initial TRE index value is greater than 8.0 and the recalculated TRE index value is less than or equal to 8.0 but greater than 1.0, the permittee shall conduct a performance test in accordance with 40 CFR 60.8 and 40 CFR 60.664 and shall comply with 40 CFR 60.663, 60.664, and 60.665. Performance tests must be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.
- [Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]
- (8) In accordance with 40 CFR 60.663(e), the permittee seeking to comply with the TRE index value limit specified under 40 CFR 60.662(c) of greater than or equal to 1.0, shall install, calibrate, maintain, and operate according to manufacturer's specifications the equipment specified in 40 CFR 60.663(e)(1), (2), or (3), unless alternate monitoring procedures or requirements are approved for that facility by the Administrator.
- [Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]
- (9) In accordance with 40 CFR 60.665, the permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.662(c):
- a. any changes in production capacity feedstock type, catalyst type, or of any replacement, removal, or addition of recovery equipment or a distillation unit;
 - b. any recalculation of the TRE performed pursuant to 40 CFR 60.664(g); and
 - c. the results of any performance test performed pursuant to 40 CFR 60.664(e).
- [Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]
- (10) In accordance with 60.664(h), the permittee shall use Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A as appropriate for determination of the flow rate to demonstrate compliance with 40 CFR 60.660(c)(6).
- [Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]
- (11) In accordance with 60.665(i), the permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.660(c)(6):
- a. that the vent stream flow rate is less than 0.008 standard cubic meter per minute; and
 - b. any change in equipment or process operation that increases the vent stream flow rate including a measurement of the new vent stream flow rate.

[Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]

- (12) The permittee shall maintain records for benzene waste operations in accordance with the requirements specified in 40 CFR 61.356, 40 CFR 63.356(a), and 61.356(b) and section B.7 of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61 and 3745-77-07(C)(1)]

- (13) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (14) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.114(a)	requirement to install catalyst bed temperature monitoring devices
63.114(c)	authorization to monitor parameters other than temperature
63.114(d)(1) and (2) [No longer applicable on or after July 15, 2027]	requirement to install monitoring devices for bypass line valves
63.114(d)(3), applicable on and after July 15, 2027	the use of a bypass line at any time on a closed vent system to divert emissions (subject to the emissions standards in 63.112) to the atmosphere or to a control device not meeting the requirements specified in Subpart G, is an emissions standards violation.
63.118(a)	record keeping for process vent control devices
63.123(a), (f) and (h)	record keeping for storage tanks that elect to comply with 49 CFR 63.119(e)
63.148(a)	leak inspection provisions for vapor collection systems, closed-vent systems, fixed roofs, covers, or enclosures
63.152(f) and (g)	general record keeping requirements
Table 3 to Subpart G of Part 63	general monitoring and record keeping
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]	process vent monitoring and record keeping
Table 11 to Subpart G of Part 63	wastewater inspection and monitoring

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit periodic reports in accordance with 40 CFR 63.152(c). The periodic reports shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in 40 CFR 63.117 and 63.118 for process vents and all information specified in 40 CFR 63.146 for process wastewater, including reports of each excursion, (i.e. each period when a monitored parameter is outside of the established range and periods of insufficient monitoring data) using the procedures described in 63.152(c)(2)(i) through 63.152(c)(2)(iv).

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (2) The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5). The semiannual start-up, shutdown and malfunction reports may be submitted on the same schedule as the periodic reports required under 40 CFR 63.152(c) instead of the schedule specified in 40 CFR 63.10(d)(5). On and after July 15, 2027, the requirement submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.152(d)(1) and 40 CFR 63.10(d)(5) no longer applies.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (3) Except as specified in 63.113(a)(4), whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in 40 CFR 63.118(g) through (j) and the permittee shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100.
 - a. the recalculated TRE index value is less than or equal to 1.0;
 - b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;
 - c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or
 - d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (4) The permittee shall submit information required in 40 CFR 60.665(b)(4) when demonstrating compliance with the TRE index value of greater than 1.0 option of 40 CFR 60.662(c).

[Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]

- (5) The permittee shall submit semiannual reports in accordance with the requirements of 40 CFR 60.665(l), including the following recorded information:
 - a. Any change in equipment or process operation that increases the operating vent stream flow rate above the low flow exemption level in 40 CFR 60.660(c)(6), including a measurement of the new vent stream flow rate, as recorded under 40 CFR 60.665(i). These must be reported as soon as possible after the change and no later than 180 days after the change. These reports may be submitted either in conjunction with semi-annual reports or as a single separate report. A performance test must be completed with the same time period to verify the recalculated flow value and to

obtain the vent stream characteristics of heating value and ETOC. The performance test is subject to the requirements of 40 CFR 60.8. Unless the facility qualifies for an exemption under the low capacity exemption status in 40 CFR 60.660(c)(5), the facility must begin compliance with the requirements set forth in 40 CFR 60.662.

b. Any recalculation of the TRE index value, as recorded under 40 CFR 60.665(h).

[Authority for term: 40 CFR Part 60 and 3745-77-07(C)(1)]

- (6) The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357 and section B.7 of the Facility-Wide Terms and Conditions.

[Authority for term: 40 CFR Part 61 and 3745-77-07(C)(1)]

- (7) The deviation reports shall be submitted in accordance with the requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: 3745-77-07(C)(1)]

- (8) The permittee shall submit all reports required by 40 CFR Part 63, Subparts F, G, and H to Ohio EPA via Air Services, in accordance with 40 CFR 63.103(d). The permittee may elect to send HON MACT compliance reports to both Ohio EPA and U.S. EPA.

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (9) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general periodic reporting requirements
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (10) The permittee shall submit semiannual reports and other such notifications and reports via the Air Services component of the Ohio EPA's eBusiness Center as are required pursuant to 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.152(a)	descriptions of the required periodic reports
Table 3 to Subpart G of Part 63	general reporting
Table 4 to Subpart G of Part 63 [No longer applicable on or after July 15, 2027]	process vent reporting

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

Total VOC emissions (including acetone) from all equipment except for the fugitive equipment leaks shall not exceed 60.45 pounds per day.

Total VOC emissions (including acetone) from all equipment except for the fugitive equipment leaks shall not exceed 11.03 tons per year, as a rolling, 12-month summation.

Total VOC emissions (including acetone) from all modified equipment (established in 2008 PTI 07-00500) (including egress points AMS223 and AMS224) except for fugitive equipment leaks shall not exceed 14.6 pounds per day.

Total VOC emissions (including acetone) from all modified equipment (established in 2008 PTI 07-00500) (including egress points AMS223 and AMS224) except for fugitive equipment leaks shall not exceed 2.66 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method

The VOC and acetone emissions (potential to emit) from the equipment listed below shall be summed. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual hours of operation per month and the conversion factor of ton/2000 lbs, to arrive at the tons per month emissions. The monthly emissions shall be added to the previous 11 months emissions to determine the rolling, 12-month total emissions.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.

Equipment ID	Equipment Description	Egress Point	Control Device	VOC (lb/day)	VOC (tpy)	Acetone (lb/day)	Acetone (tpy)	Notes
314-FA	Crude AMS storage tank	AMSP114	None	12.38	2.26	0.00	0.00	1
3505-F	AMS feed tank	AMSP 211	None	28.75	5.25	0.00	0.00	1
3507-FA	AMS product tank	AMSP 212	None	2.36	0.43	0.00	0.00	1
3507-FB	AMS product tank	AMSP 213	None	2.36	0.43	0.00	0.00	1
3502-F	3501-E and 3500-E AMS topping columns reflux drum	AMSP 223	None	1.13	0.21	13.39	2.44	1
3503-F	3502-E AMS tailing column reflux drum	AMSP 224	None	0.08	0.01	0.00	0.00	1

i.VOC and acetone emissions (lb/day and tpy) from this equipment are uncontrolled. These values represent the potential to emit and are identified in previous application submittals (PTI 07-00500). Individual equipment VOC and acetone (lb/day and tpy) values are not independently enforceable in this permit.

[Authority for term: 40 CFR Part 63, OAC rule 3745-31-05, and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

9. T065, 2003-FR1

Operations, Property and/or Equipment Description:

200,000 gallon AMS Intermediates storage tank (2003-FR1) with an internal floating roof and submerged fill

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0130817 issued 04/29/2026)	Volatile organic compound (VOC) emissions shall not exceed 0.092 ton per year.
b.	OAC rule 3745-21-09(L)	See b)(2)a.
c.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)b.
d.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
e.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.



f.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	See B.2.
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(2) Additional Terms and Conditions

- a. The requirements of OAC rule 3745-21-09(L) shall not apply to Tank 2003-FR1 (emissions unit T065) since AMS Intermediates does not meet the definition of a petroleum liquid as defined in OAC rule 3745-21-01(E)(13).
- b. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	General record keeping requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart G, National Emission Standards for

Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.123(a)	Keep records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 0.092 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput calculated using U.S. EPA's TANKS 5.1 program or equivalent. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

10. Emissions Unit Group - Loading: J004, J006, and J008

EU ID	Operations, Property and/or Equipment Description
J004	Phenol (and intermediates), Acetone, Alphas-methylstyrene (AMS) (and intermediates) railcar loading with top load, submerged fill
J006	Phenol (and intermediates), Acetone, and Alphas-methylstyrene (AMS) (and intermediates) truck loading with top load, submerged fill
J008	Cumene Railcar Unloading

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI P0130814 issued 04/24/26 for J004 and J006, and PTI 07-00508 issued 9/25/2001 for J008)	<u>For emissions units J004 and J006:</u> VOC emissions shall not exceed 12.94 tons per year. Acetone emissions shall not exceed 303.0 tons per year. <u>For emissions unit J004:</u> See b)(2)a. <u>For emissions unit J008:</u> VOC emissions from fugitive equipment leaks shall not exceed 0.53 pound per hour and 2.31 tons per year. See b)(2)b.
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)c.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109)	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subparts G and H.

	[in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing transfer rack source associated with the chemical manufacturing process units.]	
d.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing transfer rack source associated with the chemical manufacturing process units.]	The permittee shall comply with the Group 2 transfer rack record keeping requirement in 40 CFR 63.130(f).

(2) Additional Terms and Conditions

- a. For emissions unit J004, Best Available Technology (BAT) determination: compliance with allowable mass emissions and Additional Special Terms and Conditions of this permit; compliance with applicable requirements for HON Group 2 transfer racks.
- b. For emissions unit J008, the hourly and annual emission limits were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limit.
- c. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 transfer rack required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	general record keeping requirements
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 transfer rack required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.130(f)	Record, update annually, and maintain the following information in a readily accessible location on site: an analysis demonstrating the design and actual annual throughput of the transfer rack; an analysis documenting the weight-percent of organic HAPs in the liquid loaded; and an analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack.
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[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) None.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

For J004 and J006, VOC emissions shall not exceed 12.94 tons per year.

Applicable Compliance Method

Compliance shall be demonstrated in accordance with the equations and procedures obtained from AP-42, Volume 1, 5th Edition, Chapter 5, Section 5.2, dated January, 1995 as summarized below. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

- i. phenol: multiply the annual throughput of the loading rack in gallons per year times the constant 0.01246 times the saturation factor of 1.45 times the true

vapor pressure of the phenol, 0.0626 psia, times the molecular weight of phenol vapors, 94.11 pound per pound-mole, divided by the temperature of the phenol loaded, 590 degrees Rankin divided by 2,000 pounds per ton; and

- ii. alphas-methylstyrene (AMS): multiply the annual throughput of the loading rack in gallons/year times the constant of 0.01246 times the saturation factor of 1.45 times the true vapor pressure of AMS, 0.0138 psia, times the molecular weight of AMS vapors, 118.18 pound/pound-mole, divided by the temperature of the AMS loaded, 515 degrees Rankin divided by 2,000 pounds/ton.

b. Emission Limitation:

For J004 and J006, Acetone emissions shall not exceed 303.0 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the equations and procedures obtained from AP-42, Volume 1, 5th Edition, Chapter 5, Section 5.2, dated January, 1995 as summarized below. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

acetone: multiply the annual throughput of the loading rack in gallons per year times the constant 0.01246 times the saturation factor of 1.45 times the true vapor pressure of acetone, 2.5512 psia, times the molecular weight of acetone vapors, 58.08 pound per pound-mole, divided by the temperature of the acetone loaded, 515 degrees Rankin divided by 2,000 pounds per ton.

c. Emission Limitation:

For J008, VOC emissions from fugitive equipment leaks shall not exceed 0.53 pounds per hour and 2.31 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the emission rates from each type of equipment in VOC service within the process. Equipment types include: valves, pump seals, pressure relief valves, connectors, open ended lines, and sampling connections. For each equipment type use the SOMI average emission factors (EPA-453/R-93-026, Table 2.1, dated 6/93) and the following equation:

VOC emission rate from a given equipment type (pounds/hour) = average emission factor (pounds/hour/equipment type) times the average weight fraction of VOC in the stream times the number of pieces of the equipment type in the stream times 8,760 hours/year divided by 2,000 pounds/ton.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

11. Emissions Unit Group - Tanks: T023, T024, T025, T026, T033, T034, T039, T045, T046, and T064

EU ID	Operations, Property and/or Equipment Description
T023	1504000 gallon fixed roof storage tank for cumene
T024	1504000 gallon fixed roof storage tank for cumene
T025	993000 gallon fixed roof storage tank for phenol
T026	993000 gallon fixed roof storage tank for phenol
T033	2086000 gallon fixed roof storage tank for cumene
T034	977600 gallon fixed roof storage tank for phenol
T039	1015112 gallon fixed roof storage tank for cumene
T045	846850 gallon fixed roof Stormwater storage tank
T046	846850 gallon fixed roof Stormwater storage tank
T064	41130 gallon fixed roof storage tank for hydrogenation AMS

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI 07-00451 issued 2/25/2008 for T023, T024, T025, T026, T033, T034, T039, and T064) (PTI 07-00449 issued 12/04/2001 for T045 and T046)	<u>For emissions units T023 and T024:</u> Volatile organic compound (VOC) emissions shall not exceed 5.86 tons per year. <u>For emissions units T025 and T026:</u> Volatile organic compound (VOC) emissions shall not exceed 4.93 tons per year. <u>For emissions unit T033:</u> Volatile organic compound (VOC) emissions shall not exceed 7.96 tons per year.



		<u>For emissions unit T034:</u> Volatile organic compound (VOC) emissions shall not exceed 5.06 tons per year. <u>For emissions unit T039:</u> Volatile organic compound (VOC) emissions shall not exceed 4.94 tons per year. <u>For emissions units T045 and T046:</u> Volatile organic compound (VOC) emissions shall not exceed 1.65 tons per year. <u>For emissions unit T064:</u> Volatile organic compound (VOC) emissions shall not exceed 6.55 tons per year. See b)(2)a.
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)b.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109)	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.
	[in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	

(2) Additional Terms and Conditions

- a. BAT Determination: Submerged fill; Compliance with applicable requirements for Group 2 HON storage vessels.
- b. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general

provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	General record keeping requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.123(a)	Keep records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions (for emission units T023 and T024) shall not exceed 5.86 tons per year.

Applicable Compliance Method

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

b. Emission Limitation:

VOC emissions (for emissions units T025 and T026) shall not exceed 4.93 tons per year.



Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

c. Emission Limitation:

VOC emissions (for emission unit T033) shall not exceed 7.96 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

d. Emission Limitation:

VOC emissions (for emission unit T034) shall not exceed 5.06 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

e. Emission Limitation:

VOC emissions (for emission unit T039) shall not exceed 4.94 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

f. Emission Limitation:

VOC emissions (for emission units T045 and T046) shall not exceed 1.65 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

g. Emission Limitation:

VOC emissions (for emission unit T064) shall not exceed 6.55 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

12. Emissions Unit Group - Tanks: T029, T030, T059, and T063

EU ID	Operations, Property and/or Equipment Description
T029	200,000 gallon heavy hydrocarbon storage tank (2104-F) with a fixed roof, submerged fill and the following air pollution control devices: scrubber (2502-LF), condenser (2105-C)
T030	246,000 gallon heavy hydrocarbon storage tank (2105-F) with a fixed roof, submerged fill and the following air pollution control devices: scrubber (2502-LF), condenser (2105-C)
T059	11844 gallon hydrogenation feed tank
T063	112,800 gallon heavy hydrocarbon storage tank (2108-F) with a fixed roof, submerged fill and the following air pollution control devices: scrubber (2502-LF), condenser (2105-C)

- 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 operation(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 are identified below. 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.	OAC rule 3745-31-05(A)(3) (PTI 07-00232 issued 2/27/1991 for T029, T030) (PTI 07-00451 issued 2/25/2008 for T059) (PTI 07-00435 issued 1/15/1997 for T063)	<u>For emissions units T029 and T030:</u> Volatile organic compound (VOC) emissions shall not exceed 0.40 ton per year. <u>For emissions unit T059:</u> Volatile organic compound (VOC) emissions shall not exceed 1.11 tons per year. <u>For emissions unit T063:</u> Volatile organic compound (VOC) emissions shall not exceed 1.8 pounds per day and 0.33 ton per year. See b)(2)a.
b.	40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16)	See b)(2)b.
c.	40 CFR Part 63, Subpart F (40 CFR 63.100 – 63.109)	This subpart provides applicability provisions, definitions, and other general provisions that are applicable to 40 CFR Part 63, Subpart G.



	[in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	
d.	40 CFR Part 63, Subpart G (40 CFR 63.110 – 63.153) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	The permittee shall comply with the Group 2 record keeping requirement in 40 CFR 63.123(a) and is not required to comply with any other provisions in 40 CFR 63.119 through 63.123.
e.	40 CFR Part 63, Subpart H (40 CFR 63.160 – 63.184) [in accordance with 40 CFR 63.100(b), the provisions of 40 CFR Part 63, subparts F, G, and H of the Hazardous Organic NESHAP (HON) rule applies to this existing storage vessel source associated with the chemical manufacturing process units.]	See B.2.
f.	40 CFR Part 60, Subpart Kb (applies only to emission units T030 and T063)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The closed vent system for storage tanks T029 and T030 shall be designed to collect all VOC vapors and gases discharged from the storage vessels operated to no detectable emissions as indicated by an instrument reading of less than 500 pm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV.
- b. This group 2 storage vessel (emission units T030 and T063 only) is subject to the provisions of 40 CFR Part 60, Subpart Kb but is required to comply only with 40 CFR Part 63, Subparts F, G, and H.

- c. The heavy hydrocarbon by-product fuel is hazardous waste; therefore, tank 2104-F, 2105-F, and 2108-F (emissions units T029, T030) are subject to the requirements of 40 CFR Part 264 and 265.
- d. This subpart provides applicability provisions, definitions, and other general provisions that are applicable under 40 CFR Part 63, Subparts F and G.
 - i. Table 3 to 40 CFR Part 63, Subpart F of "General Provisions Applicability to Subparts F, G, and H", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subparts F and G.
 - ii. Table 1A to 40 CFR Part 63, Subpart G - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart G.
 - iii. Table 4 to Subpart H of Part 63 - "Applicable 40 CFR Part 63 General Provisions", provides applicability provisions, definitions, and other general provisions 40 CFR Part 63, Subpart A that are applicable to emissions units affected by 40 CFR Part 63 Subpart H.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, including the following sections:

63.103(c)	General record keeping requirements
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping for a Group 2 storage vessel required under 40 CFR Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including the following sections:

63.123(a)	Keep records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel
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[Authority for term: 40 CFR Part 63 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) None.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

VOC emissions (for emission units T029 and T030) shall not exceed 0.40 ton per year.

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the VOC emission factor of 7.46 x 10⁻⁹ ton VOC per gallon heavy hydrocarbon feed, by the maximum quantity of heavy hydrocarbon feed to the tank in gallons per year. The VOC emission factor was calculated from the results of the December 1992 stack test. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

b. Emission Limitation:

VOC emissions (for emission unit T059) shall not exceed 1.11 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

c. Emission Limitation:

VOC emissions (for emission unit T063) shall not exceed 1.8 pounds per day and 0.33 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated September, 1997. Alternate emission factors may be used with prior approval by the Portsmouth Local Air Agency and may also require the PTI and this permit to be modified.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.