Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

08/18/2022

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Jeffrey Kramer
PureCycle Ohio, LLC.
1125 County Road 1A
Ironton, OH 45638

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0744010178
Permit Number: P0131510
Permit Type: OAC Chapter 3745-31 Modification
County: Lawrence

Dear Permit Holder:

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

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

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

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

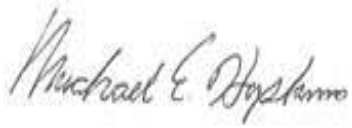
This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) website here: https://epa.ohio.gov/dapc/permitsonline.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Portsmouth City Health Dept., Air Pollution Unit at (740)353-5156 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

cc: Portsmouth

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
PureCycle Ohio, LLC.

Facility ID:	0744010178
Permit Number:	P0131510
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	08/18/2022
Effective:	08/18/2022
Expiration:	09/06/2023

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
PureCycle Ohio, LLC.

Table of Contents

Authorization 1
List of Commonly Used Abbreviations 3
A. Standard Terms and Conditions 4
1. What does this permit-to-install and operate (PTIO) allow me to do? 5
2. Who is responsible for complying with this permit? 5
3. What records must I keep under this permit? 5
4. What are my permit fees and when do I pay them? 5
5. When does my PTIO expire, and when do I need to submit my renewal application? 5
6. What happens to this permit if my project is delayed or I do not install or modify my source? 6
7. What reports must I submit under this permit? 6
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and permit evaluation report (PER) obligations under this permit? 6
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? 6
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 7
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 7
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 7
13. Can I transfer this permit to a new owner or operator? 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 8
15. What happens if a portion of this permit is determined to be invalid? 8
B. Facility-Wide Terms and Conditions 9
C. Emissions Unit Terms and Conditions 11
1. F001, Railcar Loading 12
2. P003, Final Product Handling 16
3. P004, Polypropylene Purification System (ISBL) 20

Authorization

Facility ID:	0744010178
Application Number(s):	A0070105, A0071592, A0071876
Permit Number:	P0131510
Permit Description:	Chapter 31 modification to final product material handling and polypropylene purification system due to design changes, add a thermal oxidizer as VOC control and separate railcar loading as a separate emissions unit.
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$3,250.00
Issue Date:	08/18/2022
Effective Date:	08/18/2022
Expiration Date:	09/06/2023

Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

PureCycle Ohio, LLC.
1125 County Rd 1A
Ironton, OH 45638

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

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

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 this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Laurie A. Stevenson
Director

Entered into the Journal of the Director on:

Date: 08/18/2022

Authorization (continued)

Permit Number: P0131510
Permit Description: Chapter 31 modification to final product material handling and polypropylene purification system due to design changes, add a thermal oxidizer as VOC control and separate railcar loading as a separate emissions unit.

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

Emissions Unit ID:	**F001**
Company Equipment ID:	Railcar loading
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Final Product Handling
Superseded Permit Number:	P0124362
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	Polypropylene Purification System (ISBL)
Superseded Permit Number:	P0124362
General Permit Category and Type:	Not Applicable

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	IBR = Incorporation by Reference	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	ID = Identification Number (typically referring to a facility ten-digit ID number)	PM = particulate matter
BACT = Best Available Control Technology	LAER = Lowest Achievable Emission Rate	PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	lb(s)/hr = pound(s) per hour	$PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act (1955, 70, 77, 80)	LDAR = Leak Detection and Repair	ppb = parts per billion
CAAA = Clean Air Act Amendments (1990)	LPG = liquefied petroleum gas/propane	ppm = parts per million
CAM = Compliance Assurance Monitoring	MACT = Maximum Achievable Control Technology	PSD = Prevention of Significant Deterioration
CEM = Continuous Emissions Monitor	MAGLC = Maximum Acceptable Ground Level Concentration	psi = pounds per square inch
CEMS = Continuous Emissions Monitoring System	mg/m3 = milligrams per cubic meter	psia = pounds per square inch absolute
CFC = chlorofluorocarbon	MM = million	PTE = Potential-to-Emit
CFR = Code of Federal Regulations	MMBtu = million British Thermal Units	PTI = Permit-to-Install
CH_4 = methane	MON = Miscellaneous Organic Chemical Manufacturing NESHAP	PTIO = Permit-to-Install and Operate
CI = compression ignition		PTO = Permit-to-Operate
CO = carbon monoxide	MSDS = Material Safety Data Sheet	PWR = process weight rate
CO_2 = carbon dioxide	MSW = Municipal Solid Waste	RACM = Reasonably Available Control Measures
COM = Continuous Opacity Monitor	NAAQS = National Ambient Air Quality Standard	RACT = Reasonably Available Control Technology
DAPC = Division of Air Pollution Control	NESHAP = National Emission Standard for Hazardous Air Pollutants	RATA = Relative Accuracy Test Audit
DO/LAA = District Office/Local Air Agency	NG = natural gas	RTO = regenerative thermal oxidizer
dscf = dry standard cubic foot	ng/m3 = nanograms per cubic meter	SB265 = Senate Bill 265
EAC = Emissions Activity Category	NH_3 = ammonia	scfm = standard cubic feet per minute
eDocs = Electronic Documents Database	NMHC = non-methane hydrocarbons	SI = spark ignition
ERAC = Environmental Review Appeals Commission	NMOC = non-methane organic compound	SIP = State Implementation Plan
ESP = electrostatic precipitator	NNSR = Nonattainment New Source Review	SM = Synthetic Minor
EU = Emissions Unit	NO = nitrogen oxide	SO_2 = sulfur dioxide
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NO_2 = nitrogen dioxide	SOB = Statement of Basis
FER = Fee Emissions Report	NO_x = nitrogen oxides	SSMP = Startup, Shutdown and Malfunction Plan
FR = Federal Register	NSPS = New Source Performance Standard	T & C = Term and Condition
GACT = Generally Achievable Control Technology	NSR = New Source Review	TDS = total dissolved solids
GHG = greenhouse gases	NTV = Non-Title V	TLV = Threshold Limit Value
gr = grains	O&M = Operation and Maintenance	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	O_3 = ozone	TPH = ton(s) per hour
H_2S = hydrogen sulfide	OAC = Ohio Administrative Code	TPY = ton(s) per year
H_2SO_4 = sulfuric acid	OC = organic compound	TSP = total suspended particulates
HAP = hazardous air pollutant	OEPA = Ohio Environmental Protection Agency	VE = visible emissions
HCl = hydrochloride	ORC = Ohio Revised Code	VMT = vehicle miles traveled
HF = hydrogen fluoride	Pb = lead	VOC = volatile organic compound
Hg = mercury	PBR = Permit-By-Rule	WPP = Work Practice Plan
HON = Synthetic Organic Chemical Manufacturing NESHAP	PCB = polychlorinated biphenyl	µg/m3 = micrograms per cubic meter
hp = horsepower	PE = particulate emissions	
HVLP = high volume, low pressure	PEMS = Predictive Emissions Monitoring System	

A. Standard Terms and Conditions

1. What does this permit-to-install and operate (PTIO) allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11 or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (either electronically through Ohio

EPA's eBusiness Center: Air Services web service or postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended once by 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and permit evaluation report (PER) obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Portsmouth City Health Dept., Air Pollution Unit in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his/her authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shut down emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, the new owner or operator must follow the procedures in OAC Chapter 3745-31-07, including notifying Ohio EPA or the

local air agency of the change in ownership or operator within thirty days of the transfer date. Any transferee of this permit shall assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

C. Emissions Unit Terms and Conditions

1. F001, Railcar Loading

Operations, Property and/or Equipment Description:

Loading of final product into railcar inside an enclosed building – includes railcar loading storage silo (S-2660) controlled by a bin vent filter and loading into railcar (RLO-1).

Ch 31 PTIO modification to separate railcar loading into a separate emission unit as this operation was previously included as part of EU P003 (product handling) in PTIO P0124362, issued 9/6/2018.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. 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)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the potential to emit is less than 10 tons per year taking into account the voluntary restriction from OAC rule 3745-31-05(E).
b.	OAC rule 3745-31-05(E)	The permittee shall employ a filter with a minimum PE design control efficiency of 99% on the storage silo (S-2660) and railcar loading shall occur inside a building with a minimum of 70% control efficiency. See b)(2)a.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse/filter stacks shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	PE shall not exceed 40.0 lbs/hr.

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to a filter at all times the emissions unit is in operation.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks on each storage silo's (S-2660) filter (FS-2660-01) associated with this EU, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the Portsmouth Local Air Agency, modify the above-mentioned frequencies for performing the visible emissions

checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Portsmouth Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(1) above:

a. all days during which any visible particulate emissions were observed from the stacks serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Portsmouth Local Air Agency.

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:

The permittee shall employ filters with a minimum PE design control efficiency of 99% on the storage silo (S-2660).

Applicable Compliance Method:

If required, compliance shall be demonstrated through emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation:

PE shall not exceed 40.0 lbs/hr.

Applicable Compliance Method:

This emission limitation was established using Table 1 of the appendix to OAC rule 3745-17-11 and a maximum process weight rate of 30 tons/hr.

If required, compliance shall be demonstrated through emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

Visible PE from the storage silo filter 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 through visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

2. P003, Final Product Handling

Operations, Property and/or Equipment Description:

Final Product handling includes (3) finished product storage silos (S-2610, S-2620, S-2630) and (1) startup storage silo (S-2510) controlled with bin vent filters

Ch 31 PTIO modification to PTIO P0124362, issued final 9/6/18, due to design changes including adding a finished product storage silo and a startup product storage silo. Truck loading was determined to be DeMinimis.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. 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)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the potential to emit is less than 10 tons per year taking into account the voluntary restriction from OAC rule 3745-31-05(E).
b.	OAC rule 3745-31-05(E)	The permittee shall employ bin vent filters with a minimum PE design control efficiency of 99% on the storage silos (S-2610, S-2620, S-2630, S-2510). See b)(2)a.
c.	OAC rule 3745-17-07(A)	Visible PE from the bin vent filter stacks shall not exceed 20% opacity, as a 6-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	PE shall not exceed 34.5 lbs/hr.

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to a bin vent filter at all times the emissions unit is in operation.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks on each bin vent filter associated with this EU (FS-2610-01, FS-2620-01, FS-2630-01, FS-2510-01), when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations,or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the Portsmouth Local Air Agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Portsmouth Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(1) above:

a. all days during which any visible particulate emissions were observed from the stacks serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Portsmouth Local Air Agency.

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:

The permittee shall employ bin vent filters with a minimum PE design control efficiency of 99% on the storage silos (S-2610, S-2620, S-2630, S-2510).

Applicable Compliance Method:

If required, compliance shall be demonstrated through emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation:

PE shall not exceed 34.5 lbs/hr.

Applicable Compliance Method:

This emission limitation was established using using calculation $E=4.10(P)^{0.67}$ from Table 1 of the appendix to OAC rule 3745-17-11 and a maximum process weight rate of 24 tons/hr.

If required, compliance shall be demonstrated through emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

Visible PE from the bin vent filter stacks 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 through visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

3. P004, Polypropylene Purification System (ISBL)

Operations, Property and/or Equipment Description:

Polypropylene purification system (ISBL, degasser, waste and CoProduct handling) controlled by a thermal oxidizer and flare.

Ch 31 PTIO modification to PTIO P0124362, issued final 9/6/18, due to increased production and design changes including the addition of a degasser, waste and CoProduct handling and a thermal oxidizer as VOC control device.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. 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)	Fugitive VOC emissions from equipment leaks shall not exceed 1.95 tpy. Develop and implement a site-specific leak detection and repair (LDAR) program for ancillary and associated equipment described in paragraph c)(3). VOC emissions from the thermal oxidizer shall not exceed 5.92 tons per rolling 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		VOC emissions from the flare shall not exceed 11.53 tons per rolling 12 - month period. See c)(1). Uncontrolled VOC emissions from process vents (B-730 discharge, PJ-320 pellet dryer vent, terminator valve off E-2640) shall not exceed 0.282 ton per month averaged over a 12-month rolling period. CO emissions from flare combustion shall not exceed 1.71 tons per month averaged over a rolling 12 -month period. CO emissions from thermal oxidizer combustion shall not exceed 0.14 tons per month averaged over a rolling 12 - month period.
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 emissions from thermal oxidizer combustion and from the degasser and waste handling since the potential to emit is less than 10 tons per year. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx emissions from flare combustion and thermal oxidizer combustion since the potential to emit is less than 10 tons per year. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO2 emissions from the thermal oxidizer combustion since the uncontrolled potential to emit is less than 10 tpy.

"Ancillary Equipment" means components such as a pump, compressor, pressure relief device, sampling connection system, open ended valve or line, valve, flange, connector, closed vent system, and any other device or system within a process unit.

2 The leak detection and repair program described in this permit is required as part of Ohio's Best Available Technology requirements. Portions of 40 CFR Part 60, Subpart

OOOOa are referenced and should be followed, but 40 CFR Part 60, Subpart OOOOa is not applicable to this emissions unit.

3 The equipment leak component count to determine the Fugitive VOC emissions from equipment leaks, listed above, as submitted in the application, reflects an accurate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove "Ancillary Equipment" without a permit revision as long as the components continue to comply with the applicable requirements listed below, and the changes do not: (1) cause a significant increase of emissions; or (2) result in the applicability of an additional standard that is not specified in this permit. Any changes in the "Ancillary Equipment" count will be updated yearly with the annual Permit Evaluation Report (PER)

(2) Additional Terms and Conditions

a. The permittee shall properly install, operate, and maintain a device to continuously monitor the flare pilot flame or electric arc ignition when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

c) Operational Restrictions

(1) The permittee shall install and operate a thermal oxidizer with a minimum of 98 % VOC control efficiency and a flare with a minimum of 99.5% VOC control efficiency whenever this emissions unit is in operation and shall maintain the thermal oxidizer and flare in accordance with the manufacture's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(2) In accordance with the flare manufacturer, the flare shall be operated in accordance with the following, conditions in order to achieve the required 99.5% VOC destruction efficiency:

a. the gas mixture combusted in the flare serving this emissions unit shall not be less than 300 Btu/scf.

b. the flare exit velocity shall be equal to or less than the maximum allowable velocity as calculated in 40 CFR 60.18 for the gas mixture being flared.

(3) A pilot flame shall be maintained at all times in the flare's pilot light burner. The presence of the pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame.

(4) Ancillary and Associated Equipment Leak Detection and Repair Program

The permittee shall develop and implement a leak detection and repair program designed to monitor and repair leaks from ancillary and associated equipment covered by this permit, including pumps, compressors, pressure relief devices, sampling connection systems, open ended valves or lines, valves, flanges, connectors, closed vent systems,

and any other device or system within a process unit. This program of implementation shall fulfill all requirements of 40 CFR 60.5397a, including the following:

a. Leaks shall be detected by the use of either a "Forward Looking Infra-Red" (FLIR) camera or an analyzer meeting U.S. EPA Method 21 of 40 CFR Part 60, Appendix A.

b. The written plan shall include as a minimum all requirements for inventorying and marking affected components, specifying the route to be followed to ensure access or proper viewing angles for affected components, and identification, justification, and special procedures to be followed for any affected sources given designations of "difficult-to-monitor" or "unsafe-to-monitor" as prescribed under sections (d) and (g) and elsewhere as applicable under 40 CFR 60.5397a.

c. An initial monitoring survey shall be completed within 60 days of startup of the process unit, and quarterly thereafter, with the surveys being at least 60 days apart.

d. The program shall require that the leaking component be repaired or replaced as soon as practicable, but no later than 30 calendar days after the leak is detected, except as provided for in (c)(4)e.

e. The program shall allow for the delayed repair of a leaking component following the language found in 40 CFR 60.5397a(h)(2).

f. The program shall follow the Monitoring and Record Keeping requirements described in d)(6) of this permit.

(5) In the event that a leak or defect is detected in the cover, closed vent system, process equipment, or control device, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 30 calendar days after the leak is detected as allowed in 40 CFR 60.5416(c)(4). Any delay of repair of a leak or defect shall meet the requirements of 40 CFR 60.5416a(c)(5).

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance. Until compliance testing has been conducted, the thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within

± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of five years.

(3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

c. the date and time the deviation began;

d. the magnitude of the deviation at that time;

e. the date the investigation was conducted;

f. the name(s) of the personnel who conducted the investigation; and

g. the findings and recommendations.

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

h. a description of the corrective action;

i. the date corrective action was completed;

j. the date and time the deviation ended;

k. the total period of time (in minutes) during which there was a deviation;

l. the temperature readings immediately after the corrective action was implemented; and

m. the name(s) of the personnel who performed the work.

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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(2) The permittee shall maintain monthly records of the heat content of the gas mixture combusted in the flare, in Btu/scf.

(3) The permittee shall record all periods of time during which there was no pilot flame or the flare was inoperable.

(4) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the flare, along with the documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Portsmouth Local Air Agency upon request.

(5) The permittee shall conduct periodic inspections of the flare to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to Ohio EPA upon request.

(6) In addition to the recommended periodic inspections, not less than once each calendar year, but allowed a 3 month grace period to complete to allow for scheduling of the inspection team and to account for any backlog of parts needed for maintenance, the permittee shall conduct a comprehensive inspection of the flare and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

(7) The permittee shall document each inspection (periodic and annual) of the flare and shall maintain the following information:

a. the date of the inspection;

b. a description of each/any problem identified and the date it was corrected;

c. a description of any maintenance and repairs performed; and

d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date of the inspection and any necessary maintenance or repairs were completed and shall be made available to the Portsmouth Local Air Agency upon request.

(8) The permittee shall maintain records that document any time periods when the flare was not in service when the emissions unit was in operation, as well as, a record of all operations during which the flare was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to Ohio EPA upon request.

(9) The permittee shall perform an inspection each week that an operator is at the facility and the facility is in operation or is pressurized in any of its components, that are not vented to the control device (flare or thermal oxidizer), for indications of releases from the pressure relief valves, and any olfactory, visual or auditory indications of equipment leaks. The positive indication of a release or a leak shall be noted in an operations log, along with the following information:

a. the name of the inspector;

b. the date and time inspected;

c. the identification of the pressure relief valve that released and/or piece of equipment that leaked;

d. the estimated or calculated duration of the pressure relief valve release and/or equipment leak and the estimated emission totals; and

e. any corrective actions taken to minimize or eliminate the release or leak.

(10) Ancillary and Associated Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing FLIR Cameras:

a. Leaks shall be determined by visually observing each ancillary or associated component through the FLIR camera to determine if leaks are visible.

b. Intermittent/snap-action controllers showing hydrocarbon emissions shall be scanned repeatedly to determine if emissions occur only during actuation cycles. Otherwise, the controller is determined to be malfunctioning (leaking).

c. The following information shall be recorded during each leak inspection:

i. the date the inspection was conducted;

ii. a description of the manufacturer, model number and serial number of the FLIR camera;

iii. the name of the employee conducting the leak check;

iv. the identification of any component that was determined to be leaking;

v. the date the first attempt to repair the component was made;

vi. the reason the repair was delayed following the language found in 40 CFR 60.5416a(c)(5);

vii. the date the component was repaired and determined to no longer be leaking;

viii. the total number of components that are leaking; and

ix. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary or associated components capable of developing a leak, and multiplied by 100.

d. The permittee shall maintain written records that demonstrate the FLIR camera is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.

e. The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon oral or written request.

(11) Ancillary and Associated Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing a Method 21 Analyzer:

a. Leaks shall be measured by utilizing U.S. EPA Method 21 (40 CFR Part 60, Appendix A). All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is to be compared with 500 ppm or 10,000 ppm (as applicable) for determining compliance.

b. Intermittent/snap-action controllers showing hydrocarbon emissions shall be sampled repeatedly to determine if emissions occur only during actuation cycles. Otherwise, the controller is determined to be malfunctioning (leaking).

c. A component is considered to be leaking if the instrument reading is equal to or greater than:

pressure relief device in gas/vapor service	500 ppm
pressure relief device in light liquid service	500 ppm
pumps in light liquid service	500 ppm

compressor	500 ppm
sampling connection system*	*
open ended valves or lines**	**
valves in gas/vapor and light liquid service	500 ppm
closed vent system	500 ppm
connectors in gas/vapor and light liquid service	500 ppm
intermittent snap-action controllers	500 ppm
all other ancillary and associated equipment	10,000 ppm

* must be equipped with a closed-purge, closed-loop, or closed-vent system

** must be equipped with a cap, blind flange, plug, or a second valve

d. The following information shall be recorded during each leak inspection:

i. the date the inspection was conducted;

ii. the name of the employee conducting the leak check;

iii. the identification of any component that was determined to be leaking (company ID and component type (flange, pump, etc.);

iv. the date the first attempt to repair the component was made;

v. the reason the repair was delayed following the language found in 40 CFR 60.5416a(c)(5);

vi. the date the component was repaired and determined to no longer be leaking;

vii. the total number of components that are leaking; and

viii. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary or associated components capable of developing a leak, and multiplied by 100.

e. The permittee shall maintain records that demonstrate the Method 21 analyzer is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.

f. In order to calibrate the analyzer, the following calibration gases shall be used:

i. zero air, which consists of less than 10 ppm of hydrocarbon in air; and

ii. a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.

g. The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon oral or written request.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the flare during the 12-month reporting period for this emissions unit:

a. all periods of time during which the pilot flame was not functioning properly or the flare was not maintained as required in this permit. The reports shall include the date, time, and duration of each such period;

b. each month during which the gas mixture with a minimum heat content of less than 300 Btu / scf was burned in the flare.

(4) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this emissions unit:

a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;

b. any records of downtime (date and length of time) for the capture (collection) system, the thermal oxidizer, and/or the monitoring equipment when the emissions unit(s) was/were in operation; and

c. a log of the operating time for the capture system, thermal oxidizer, monitoring equipment, and the emissions unit(s).

(5) For each inspection that occurred during the year, the permittee shall submit the following information with the annual PER from data collected by the ancillary equipment leak detection and repair program:

a. the date of the inspection;

b. the number of components determined to be leaking;

c. the company ID and component type (flange, pump, etc.) of each leaking component;

d. the total number of components at the site;

e. the percent of components determined to be leaking;

f. a list of all components that have not been repaired due to a delay of repair and the reason for the delay; and

g. a notification indicating if the permittee has changed future inspection frequencies based on the percent of components leaking.

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:

CO emissions from flare combustion shall not exceed 1.71 tons per month averaged over a rolling 12 -month period.

Applicable Compliance Method:

This emission limitation was developed by multiplying the maximum heat input of 15.09 mmBtu/hr (NG 3.70 mmBtu/hr + solvent 11.39 mmBtu/hr) by the AP-42 emission factor (0.31 lb/mmBtu) from table 13.5-2 (2/18) by 8,760 hrs/yr and dividing by 2,000 lbs/ton and 12 months per year.

b. Emission Limitation:

CO emissions from thermal oxidizer combustion shall not exceed 0.14 tons per month averaged over a rolling 12 -month period.

Applicable Compliance Method:

This emission limitation was developed by multiplying the maximum natural gas heat input of 0.0045 MMscf/hr by the AP-42 emission factor (84 lb/MMscf)) from table 1.4-1 (7/98) by 8,760 hrs/yr and dividing by 2,000 lbs/ton and 12 months per year.

c. Emission Limitation:

VOC emissions from the thermal oxidizer shall not exceed 5.92 tons per rolling 12-month period.

Applicable Compliance Method:

This emission limitation was developed multiplying the flow rate (lb/hr) from each stream vented to the thermal oxidizer and the % VOC in each stream times 8760 hrs/yr and dividing by T/2000 lbs. This tpy is multiplied by the 98% control efficiency of the thermal oxidizer. The tpy from all streams vented to the thermal oxidizer is summed to arrive at the tpy emissions limit. The stream names, flow rates and %VOC information is provided in the table titled "VOC emissions Vented to the Thermal Oxidizer (TOX-3365)" provided in permit application number A0071876, submitted 6/21/2022)

Compliance with the thermal oxidizer control efficiency of 98% shall be demonstrated through emission testing performed in accordance with f)(2).

Therefore, if compliance is shown with the thermal oxidizer control efficiency limitation, compliance shall also be shown with the tons per rolling 12-month emission limitation.

d. Emission Limitation:

VOC emissions from the flare shall not exceed 11.53 tons per rolling 12 - month period.

Applicable Compliance Method:

This emission limitation was developed based on the sum of the tpy emissions from all sources vented to the flare times the 99.5 % control efficiency of the flare.

The sources vented to the flare consists of streams that are vented to the flare on a frequent basis and streams that are infrequently vented to the flare. The frequent and infrequent streams are provided in the tables titled "Frequent Streams Vented to the Flare (Low Pressure)", "Infrequent Streams Vented to the Flare (Low Pressure)" and "Infrequent Streams Vented to the Flare (High Pressure)" provided in permit application number A0071876, submitted 6/21/2022)

Compliance with the flare control efficiency of 99.5% shall be demonstrated through emission testing performed in accordance with f)(2).

Therefore, if compliance is shown with the flare control efficiency limitation, compliance shall also be shown with the tons per rolling 12-month emission limitation.

e. Emission Limitation:

Fugitive VOC emissions from equipment leaks shall not exceed 1.95 tpy.

Applicable Compliance Method:

The annual fugitive VOC emission limitation is the estimated potential-to-emit based upon the maximum number of components and type of service (gas/vapor and light liquid) expected at this facility and control efficiencies for the use of

required LDAR program. Emission factors and control efficiencies used were from TCEQ's "Air Permit Technical Guidance for Chemical Sources Fugitive Guidance" (June 2018)

f. Emission Limitation:

Uncontrolled VOC emissions from process vents (B-730 discharge, PK-320 pellet dryer vent, terminator valve off E-2640) shall not exceed 0.282 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The emission limitation was developed from the sum the VOC emissions for the uncontrolled process streams. The VOC emissions for each process stream was calculated my multiplying the flowrate (lb/hr) times the % VOC is the stream. (as provided in the calculations provided in permit application number A0071876, submitted 6/21/2022). The ton per month emission limitation was calculated by multiplying the total lb/hr VOC by 8760 hrs/yr and divided by 2000 lb/ton and dividing by 12 months per year.

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

a. The emission testing shall be conducted within 6 months after start-up of this emissions unit.

g. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for VOC from the thermal oxidizer and the overall control efficiency limitation for VOC from the flare.

h. The following test method(s) shall be employed to demonstrate compliance with the overall control efficiency:

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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 Portsmouth 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 Portsmouth 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.

5. 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).

i. 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.

j. 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.

g) Miscellaneous Requirements

(1) None.