



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

07/28/2022

Certified Mail

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

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
 Facility ID: 0744010178
 Permit Number: P0132409
 Permit Type: Initial Installation
 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:	P0132409
Permit Type:	Initial Installation
Issued:	07/28/2022
Effective:	07/28/2022
Expiration:	09/06/2023



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. P008, Feedstock Evaluation Unit (FEU).....	12



Final Permit-to-Install and Operate
PureCycle Ohio, LLC.
Permit Number: P0132409
Facility ID: 0744010178
Effective Date: 07/28/2022

Authorization

Facility ID: 0744010178
Application Number(s): A0072164
Permit Number: P0132409
Permit Description: Initial PTIO for the Feedstock Evaluation Unit used for research and development (processing of recycled polypropylene materials) that was previously operated under the de minimis exemption.
Permit Type: Initial Installation
Permit Fee: \$200.00
Issue Date: 07/28/2022
Effective Date: 07/28/2022
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

Entered into the Journal of the Director on:

A handwritten signature in cursive script that reads "Laurie A. Stevenson".

Date: 07/28/2022

Laurie A. Stevenson
Director



Final Permit-to-Install and Operate
PureCycle Ohio, LLC.
Permit Number: P0132409
Facility ID: 0744010178
Effective Date: 07/28/2022

Authorization (continued)

Permit Number: P0132409
Permit Description: Initial PTIO for the Feedstock Evaluation Unit used for research and development (processing of recycled polypropylene materials) that was previously operated under the de minimis exemption.

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

Emissions Unit ID:	P008
Company Equipment ID:	Feedstock Evaluation Unit (FEU)
Superseded Permit Number:	
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/m ³ = 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	MSDS = Material Safety Data Sheet	PTO = Permit-to-Operate
CO = carbon monoxide	MSW = Municipal Solid Waste	PWR = process weight rate
CO ₂ = carbon dioxide	NAAQS = National Ambient Air Quality Standard	RACM = Reasonably Available Control Measures
COM = Continuous Opacity Monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	RACT = Reasonably Available Control Technology
DAPC = Division of Air Pollution Control	NG = natural gas	RATA = Relative Accuracy Test Audit
DO/LAA = District Office/Local Air Agency	ng/m ³ = nanograms per cubic meter	RTO = regenerative thermal oxidizer
dscf = dry standard cubic foot	NH ₃ = ammonia	SB265 = Senate Bill 265
EAC = Emissions Activity Category	NMHC = non-methane hydrocarbons	scfm = standard cubic feet per minute
eDocs = Electronic Documents Database	NMOC = non-methane organic compound	SI = spark ignition
ERAC = Environmental Review Appeals Commission	NNSR = Nonattainment New Source Review	SIP = State Implementation Plan
ESP = electrostatic precipitator	NO = nitrogen oxide	SM = Synthetic Minor
EU = Emissions Unit	NO ₂ = nitrogen dioxide	SO ₂ = sulfur dioxide
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NO _x = nitrogen oxides	SOB = Statement of Basis
FER = Fee Emissions Report	NSPS = New Source Performance Standard	SSMP = Startup, Shutdown and Malfunction Plan
FR = Federal Register	NSR = New Source Review	T & C = Term and Condition
GACT = Generally Achievable Control Technology	NTV = Non-Title V	TDS = total dissolved solids
GHG = greenhouse gases	O&M = Operation and Maintenance	TLV = Threshold Limit Value
gr = grains	O ₃ = ozone	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OAC = Ohio Administrative Code	TPH = ton(s) per hour
H ₂ S = hydrogen sulfide	OC = organic compound	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	OEPA = Ohio Environmental Protection Agency	TSP = total suspended particulates
HAP = hazardous air pollutant	ORC = Ohio Revised Code	VE = visible emissions
HCl = hydrochloride	Pb = lead	VMT = vehicle miles traveled
HF = hydrogen fluoride	PBR = Permit-By-Rule	VOC = volatile organic compound
Hg = mercury	PCB = polychlorinated biphenyl	WPP = Work Practice Plan
HON = Synthetic Organic Chemical Manufacturing NESHAP	PE = particulate emissions	µg/m ³ = micrograms per cubic meter
hp = horsepower	PEMS = Predictive Emissions Monitoring System	
HVLP = high volume, low pressure		



Final Permit-to-Install and Operate
PureCycle Ohio, LLC.
Permit Number: P0132409
Facility ID: 0744010178
Effective Date: 07/28/2022

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.



Final Permit-to-Install and Operate
PureCycle Ohio, LLC.
Permit Number: P0132409
Facility ID: 0744010178
Effective Date: 07/28/2022

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

PureCycle Ohio, LLC.

Permit Number: P0132409

Facility ID: 0744010178

Effective Date: 07/28/2022

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.



Final Permit-to-Install and Operate
PureCycle Ohio, LLC.
Permit Number: P0132409
Facility ID: 0744010178
Effective Date: 07/28/2022

C. Emissions Unit Terms and Conditions

1. P008, Feedstock Evaluation Unit (FEU)

Operations, Property and/or Equipment Description:

Feedstock Evaluation Unit (FEU) used for research and development (processing of recycled polypropylene materials). This EU was previously operated under the de minimis exemption in OAC rule 3745-15-05 [install date of 9/16/2018].

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. 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.	OAC rule 3745-31-05(A)(3)(a)(ii)	<p>The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the point source VOC emissions since the uncontrolled potential to emit is less than 10 tons per year.</p> <p>The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the fugitive VOC equipment leak emissions since the potential to emit is less than 10 tons per year taking into account the use of the LDAR program required under OAC rule 37345-31-05(E).</p> <p>Noting that the combined point source and fugitive VOC emissions from the FEU</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		identified above are below 10 tons per year.
b.	OAC rule 3745-31-05(E)	Develop and implement a site-specific leak detection and repair (LDAR) program for fugitive VOC equipment leak emissions for ancillary and associated equipment described in paragraph c)(1).

“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. None.

c) Operational Restrictions

(1) 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)(1)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 section d) of this permit.

- (2) 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) **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.
- (2) 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



Final Permit-to-Install and Operate

PureCycle Ohio, LLC.

Permit Number: P0132409

Facility ID: 0744010178

Effective Date: 07/28/2022

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) 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. None.

g) Miscellaneous Requirements

- (1) None.