



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/21/2012

Mr. Allen Wheeler
Jay Plastics-Broscho Fab. Prod. Div.
1595 W.Longview Avenue
Mansfield, OH 44906

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0370010128
Permit Number: P0110162
Permit Type: Administrative Modification
County: Richland

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
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install 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**

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 Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO



Response to Comments

Facility ID:	0370010128
Facility Name:	Jay Plastics-Broscho Fab. Prod. Div.
Facility Description:	Fabricated Metal Products, n.e.c.
Facility Address:	1595 W. LONGVIEW AVENUE Mansfield, OH 44906 Richland County
Permit:	P0110162, Permit-To-Install and Operate - Administrative Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Mansfield News-Journal on 11/19/2012. The comment period ended on 12/19/2012.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None

- a. Comment: None
- b. Response: None



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Jay Plastics-Broscho Fab. Prod. Div.**

Facility ID:	0370010128
Permit Number:	P0110162
Permit Type:	Administrative Modification
Issued:	12/21/2012
Effective:	12/21/2012
Expiration:	12/21/2017



Division of Air Pollution Control
Permit-to-Install and Operate
for
Jay Plastics-Broscho Fab. Prod. Div.

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Final Permit-to-Install and Operate
Jay Plastics-Broscho Fab. Prod. Div.
Permit Number: P0110162
Facility ID: 0370010128
Effective Date: 12/21/2012

Authorization

Facility ID: 0370010128
Application Number(s): A0044651
Permit Number: P0110162
Permit Description: Modification to K001 to increase coating usage rate and to P001-P004 to limit operations in order to avoid Title V permitting. Annual emission rates for all emissions units have decreased in this permit modification.
Permit Type: Administrative Modification
Permit Fee: \$800.00
Issue Date: 12/21/2012
Effective Date: 12/21/2012
Expiration Date: 12/21/2017
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Jay Plastics-Broscho Fab. Prod. Div.
1595 W. LONGVIEW AVENUE
Mansfield, OH 44906

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

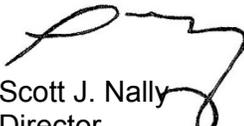
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0110162
Permit Description: Modification to K001 to increase coating usage rate and to P001-P004 to limit operations in order to avoid Title V permitting. Annual emission rates for all emissions units have decreased in this permit modification.

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

Emissions Unit ID:	K001
Company Equipment ID:	E-Coat
Superseded Permit Number:	P0087526
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	9.142 mmBtu/hr NG fired engine with 1100 KW electri
Superseded Permit Number:	03-16376
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	11.581 mmBtu/hr NG-Fired Electrical Co-Generator #1
Superseded Permit Number:	03-13510
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	11.581 mmBtu/hr NG-Fired Electrical Co-Generator #2
Superseded Permit Number:	03-13510
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	11.581 mmBtu/hr NG-Fired Electrical Co-Generator #3
Superseded Permit Number:	03-13510
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Jay Plastics-Broscho Fab. Prod. Div.
Permit Number: P0110162
Facility ID: 0370010128
Effective Date: 12/21/2012

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 (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 by up to 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 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 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 Ohio EPA DAPC, Northwest District Office 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 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 submitting¹ 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 emissions 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 shutdown 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.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



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, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must 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
Jay Plastics-Broscho Fab. Prod. Div.
Permit Number: P0110162
Facility ID: 0370010128
Effective Date: 12/21/2012

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Jay Plastics-Broscho Fab. Prod. Div.

Permit Number: P0110162

Facility ID: 0370010128

Effective Date: 12/21/2012

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.
2. The permittee is advised that this facility is subject to the "Generally Available Control Technology" (GACT) requirements under 40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). Refer to 40 CFR 63.6590(c) for specific requirements in this case. The U.S. EPA is responsible for the administration of the requirements of this rule at this time. It should be noted that the enforcement authority of the GACT requirements have not been delegated to Ohio EPA at the time of this permit processing. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office or local air agency.



Final Permit-to-Install and Operate
Jay Plastics-Broscho Fab. Prod. Div.
Permit Number: P0110162
Facility ID: 0370010128
Effective Date: 12/21/2012

C. Emissions Unit Terms and Conditions



1. K001, E-Coat Line

Operations, Property and/or Equipment Description:

23-Step Electrodeposition Coating Line with Oven

- 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)d. and d)(2)
 - (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)	0.2 pound volatile organic compounds (VOC)/gallon of coating, as applied, excluding water and exempt solvents 8.76 tons VOC per rolling, 12-month period
b.	OAC rule 3745-17-11(C)	Pursuant to OAC rule 3745-17-11(A)(1)(h), dip coating operations are exempt from the requirements of OAC rule 3745-17-11(C).
c.	OAC rule 3745-21-09(U)(1)(i)	3.0 pounds VOC/gallon of coating, excluding water and exempt solvents See b)(2)b.
d.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(2)



(2) Additional Terms and Conditions

- a. This emissions unit is a 23-step electrodeposition coating (e-coat) line. Each step was investigated, and it was determined that the emissions from all processes other than the coating dip coating tank were negligible. The following processes are included with this emissions unit:

23-Step E-Coat Line	
Step	Process
1	Soak Cleaner
2	Electro Cleaner/Pretreatment
3	Cold Water Rinse
4	Hydrochloric Acid Dip (19% hydrochloric acid solution)
5	Caustic Water Rinse
6	Alkaline Non-Cyanide Zinc Plating Process
7	Alkaline Non-Cyanide Zinc Plating Process
8	Alkaline Non-Cyanide Zinc Plating Process
9	Alkaline Non-Cyanide Zinc Plating Process
10	Alkaline Non-Cyanide Zinc Plating Process
11	Nitric Bright Dip (0.25% nitric acid solution)
12	Cold Water Rinse
13	Zirconium Dip (zirconium-based conversion coating)
14	Deionized Water Rinse
15	Deionized Water Spray
16	Powercron Epoxy (Cathodic) E-coat Tank
17	Permeate Spray Rinse
18	Permeate Rinse
19	Permeate Rinse
20	Deionized Water Rinse



23-Step E-Coat Line	
Step	Process
21	Drying Area
22	Drying Area
23	E-Coat Curing (two 1.5 mmBtu/hour natural gas-fired burners)

- b. The VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3) is more stringent than the VOC content restriction specified by this rule.
- c) Operational Restrictions
 - None
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record the following information each month for dip coating operation:
 - a. the company identification of each coating employed;
 - b. the VOC content (excluding water and exempt solvents) of each coating, as applied;
 - c. the number of gallons (excluding water and exempt solvents) of each coating, as applied;
 - d. the total monthly VOC emission rate, in tons [calculated as the sum of d)(1)b. times d)(1)c., divided by 2000 pounds/ton, for all coatings employed];
 - e. the rolling, 12-month summation of the VOC emission rate, in tons.
 - (2) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a “modification” as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) Reporting Requirements
 - (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA’s eBusiness Center: Air Services online web portal.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.
- (3) The permittee shall notify the Director (appropriate District Office or local air agency) in writing of each daily record showing a daily volume-weighted average greater than 3.0 pounds VOC per gallon, as applied, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the exceedance occurs.

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

0.2 pound VOC/gallon (excluding water and exempt solvents)

Compliance Method

The VOC content limitation was established to reflect the worst case coating employed in this emissions unit. Compliance with this limitation shall be demonstrated in accordance with the recordkeeping requirements established in section d)(1).

b. Emission Limitation

8.76 tons VOC per rolling, 12-month period

Compliance Method

The rolling, 12-month emission limitation was established based on the following calculation:

0.2 pound VOC ⁽¹⁾	240 gallons ⁽²⁾	365 days ⁽²⁾	1 ton ⁽²⁾
gallon	day	year	2,000 pounds

Where:

- ⁽¹⁾ VOC content limitation.
- ⁽²⁾ Maximum daily gallon usage rate.
- ⁽²⁾ Conversion rates.



Final Permit-to-Install and Operate

Jay Plastics-Broscho Fab. Prod. Div.

Permit Number: P0110162

Facility ID: 0370010128

Effective Date: 12/21/2012

Compliance with this emission limitation shall be demonstrated in accordance with the recordkeeping requirements established in section d)(1).

c. Emission Limitation

3.0 pounds VOC/gallon

Applicable Compliance Method

The VOC content restriction was established in accordance with OAC rule 3745-21-09(U)(1)(i). The permittee shall demonstrate compliance in accordance with the recordkeeping requirements established in section d)(1).

g) Miscellaneous Requirements

(1) None.



2. P001, Generator #4

Operations, Property and/or Equipment Description:

9.142 mmBtu/hour (1542 HP), Natural Gas-Fired, 4-Stroke, Rich-Burn, Spark Ignition, Reciprocating Internal Combustion Engine

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)g. and d)(4)

(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(D)	1.25 grams nitrogen oxides (NOx)/brake horsepower-hour (bhp-hour) 1.75 grams carbon monoxide (CO)/bhp-hour 0.40 gram volatile organic compounds (VOC)/bhp-hour 0.02 gram particulate matter ≤ 10 microns in size (PM ₁₀)/bhp-hour 5.88 E-04 pound sulfur dioxide (SO ₂)/mmBtu <u>Combined Emission Limits for P001, P002, P003, and P004:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		6.63 tons NO _x per rolling, 12-month period 10.50 tons CO per rolling, 12-month period 1.95 tons VOC per rolling, 12-month period 0.18 ton PM ₁₀ per rolling 12-month period 0.01 ton SO ₂ per rolling 12-month period See b)(2)a. and c)(1)
b.	OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
c.	OAC rule 3745-17-11(B)(5)(b)	0.062 pound particulate emissions (PE) per mmBtu
d.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-110-03(F)	This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(3).
f.	40 CFR Part 60 (NSPS), Subpart JJJ	This emissions unit is exempt from the requirements of this rule because its commence construction date is prior to June 12, 2006.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(2) Additional Terms and Conditions

- a. This permit establishes federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and PSD applicability. The following federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. The following emission limitations are for the operation of emissions unit P001, only:
 - (a) 1.25 grams NO_x/bhp-hour;
 - (b) 1.75 grams CO/bhp-hour;



- (c) 0.40 gram VOC/bhp-hour;
 - (d) 0.02 gram PM₁₀/bhp-hour; and
 - (e) 5.88 E-04 pound SO₂/mmBtu.
 - ii. The following emissions limitations are for the operation of emissions units P001, P002, P003, and P004, combined:
 - (a) 6.63 tons NOx per rolling, 12-month period;
 - (b) 10.50 tons CO per rolling, 12-month period;
 - (c) 1.95 tons VOC per rolling, 12-month period;
 - (d) 0.18 ton PM₁₀ per rolling, 12-month period; and
 - (e) 0.01 ton SO₂ per rolling, 12-month period.
- c) Operational Restrictions
 - (1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:
 - a. Emissions unit P001 shall be operated with appropriate air/fuel ratios and shall be equipped with nonselective catalytic reduction (NSCR) for the control of NOx, CO, and VOC. The gram/bhp-hour emissions limitations established for NOx, CO, and VOC were supplied by the manufacturer of this emission unit and are reflective of NSCR.
 - b. The maximum annual operating hours for P001, P002, P003, and P004, combined, shall not exceed 3,000 hours, based upon a rolling, 12-month summation of the operating hours.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit.
 - (2) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) For each day this emissions unit is operated, the permittee shall record the total hours of operation.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. the combined operating hours for P001, P002, P003, and P004 on a monthly basis; and



- b. the rolling, 12-month summation of the combined operating hours for P001, P002, P003 and P004.
 - (3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following combined emission limitations for P001, P002, P003, and P004, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 3,000 hours of operation per rolling, 12-month period.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).
- If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.
- The quarterly reports shall be submitted electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA



eBusinessCenter: Air Services 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.

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 Limitations

1.25 grams NO_x/bhp-hour

1.75 grams CO/bhp-hour

0.40 gram VOC/bhp-hour

0.02 gram PM₁₀/bhp-hour

Applicable Compliance Method

The above emission limitations were established based on information supplied by the manufacturer of this emissions unit. The emission limitations represent controlled emission rates from the use of appropriate air/fuel ratios and nonselective catalytic reduction.

The permittee shall demonstrate compliance with the NO_x, CO, and VOC emission limitations based on the results of emission testing required in section f)(2).

If required, the permittee shall demonstrate compliance with the PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

b. Emission Limitation

5.88 E-04 pound SO₂/mmBtu

Applicable Compliance Method

The above emission limitation was established in accordance with the emission factors from AP-42 Chapter 3.2: Natural Gas-fired Reciprocating Engines (7/2000).

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.



c. Emission Limitations: Combined Emission Limitations for P001, P002, P003, and P004

6.63 tons NO_x per rolling, 12-month period

10.50 tons CO per rolling, 12-month period

1.95 tons VOC per rolling, 12-month period

0.18 ton PM₁₀ per rolling, 12-month period

0.01 ton SO₂ per rolling, 12-month period

Applicable Compliance Method

The above emission limitations were established to represent the highest emission levels possible taking into consideration the worst case operating scenario for each pollutant and 3,000 flexible hours of operation for P001 – P004. Based on 3,000 hours of operation per year, the annual emissions for each generator can be calculated, as follows:

For pollutants with emission factors specified in grams/bhp-hour:

gram pollutant ⁽¹⁾ bhp-hour	HP ⁽²⁾	3000 hours ⁽³⁾ year	1 pound ⁽⁴⁾ 453.59 gram	1 ton ⁽⁴⁾ 2000 pounds
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Where:

- (1) Pollutant-specific emission factor, as supplied by permittee.
- (2) Maximum capacity of each generator [P001 = 1475 horsepower; P002 – P004 = 1542 horsepower each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rates.

For pollutants with emission factors specified in pounds/mmBtu:

pound pollutant ⁽¹⁾ mmBtu	mmBtu ⁽²⁾ hour	3000 hours ⁽³⁾ year	1 ton ⁽⁴⁾ 2000 pounds
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Where:

- (1) Emission factor from AP-42 Chapter 3.2 (7/00).
- (2) Maximum capacity of each generator [P001 = 9.142 mmBtu/hour; P002 – P004 = 11.581 mmBtu/hour each].
- (3) Restricted, annual hours of operation.



(4) Conversion rate.

Therefore, provided compliance is shown with the gram/bhp-hour and pound/mmBtu limitations and the 12-month, rolling hours of operation restriction, compliance with the annual emission limitations shall also be demonstrated.

d. Emission Limitation

0.062 pound PE/mmBtu

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-11(B)(5)(b). If required, compliance with the emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emission Limitation

Visible PE shall not exceed 20% opacity as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-07(A). If required, compliance with the visible emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for emissions unit P001 in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after the issuance of this permit. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency. Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: NOx, CO, and VOC.
- c. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

<u>Pollutant</u>	<u>Test Method</u>
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate



Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.



3. P002, Co-Generator #1

Operations, Property and/or Equipment Description:

11.581 mmBtu/hour (1475 HP), Natural Gas-Fired, 4-Stroke, Lean-Burn, Spark Ignition, Reciprocating Internal Combustion Engine

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)g. and d)(4)

(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(D)	1.30 grams nitrogen oxides (NOx)/brake horsepower-hour (bhp-hour) 2.06 grams carbon monoxide (CO)/bhp-hour 0.15 gram volatile organic compounds (VOC)/bhp-hour 9.99 E-03 pound particulate matter ≤ 10 microns in size (PM ₁₀)/mmBtu 5.88 E-04 pound sulfur dioxide (SO ₂)/mmBtu <u>Combined Emission Limits for P001, P002, P003, and P004:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		6.63 tons NOx per rolling, 12-month period 10.50 tons CO per rolling, 12-month period 1.95 tons VOC per rolling, 12-month period 0.18 ton PM ₁₀ per rolling 12-month period 0.01 ton SO ₂ per rolling 12-month period See b)(2)a. and c)(1)
b.	OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
c.	OAC rule 3745-17-11(B)(5)(b)	0.062 pound particulate emissions (PE)/mmBtu
d.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-110-03(F)	This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(3).
f.	40 CFR Part 60 (NSPS), Subpart JJJ	This emissions unit is exempt from the requirements of this rule because its commence construction date is prior to June 12, 2006.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(1) Additional Terms and Conditions

- a. This permit establishes federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and PSD applicability. The following federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. The following emission limitations are for the operation of emissions unit P002, only:
 - (a) 1.30 grams NOx/bhp-hour;
 - (b) 2.06 grams CO/bhp-hour;



- (c) 0.15 gram VOC/bhp-hour;
 - (d) 9.99 E-03 pound PM₁₀/mmBtu; and
 - (e) 5.88 E-04 pound SO₂/mmBtu.
- ii. The following emissions limitations are for the operation of emissions units P001, P002, P003, and P004, combined:
- (a) 6.63 tons NOx per rolling, 12-month period;
 - (b) 10.50 tons CO per rolling, 12-month period;
 - (c) 1.95 tons VOC per rolling, 12-month period;
 - (d) 0.18 ton PM₁₀ per rolling, 12-month period; and
 - (e) 0.01 ton SO₂ per rolling, 12-month period.
- c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. Emissions unit P002 shall be operated with appropriate air/fuel ratios and shall be equipped with nonselective catalytic reduction (NSCR) for the control of NOx, CO, and VOC. The gram/bhp-hour emission limitations for NOx, CO, and VOC were established based on uncontrolled emission factors supplied by the manufacturer of this emission unit and minimum control efficiencies for NOx, CO, and VOC supplied by the permittee, as follows:

	Emission Factor, Supplied by Manufacturer	Minimum Control Efficiency for NSCR, Supplied by Permittee
NOx	13.0 gram/bhp-hour	90%
CO	10.3 gram/bhp-hour	80%
VOC	0.2 gram/bhp-hour	25%

b. The maximum annual operating hours for P001, P002, P003, and P004, combined, shall not exceed 3,000 hours, based upon a rolling, 12-month summation of the operating hours.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit.



- (2) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day this emissions unit is operated, the permittee shall record the total hours of operation.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. the combined operating hours for P001, P002, P003, and P004 on a monthly basis; and
 - b. the rolling, 12-month summation of the combined operating hours for P001, P002, P003 and P004.
 - (3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute"; ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following combined emission limitations for P001, P002, P003, and P004, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 3,000 hours of operation per rolling, 12-month period.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).



If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

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 Limitations

- 1.30 grams NO_x/bhp-hour

- 2.06 grams CO/bhp-hour

- 0.15 gram VOC/bhp-hour

- Applicable Compliance Method

The above emission limitations were established based on emission factors supplied by the manufacturer of this emissions unit and minimum control efficiencies supplied by the permittee [See c)(1)a.]. The emission limitations represent controlled emission rates from the use of appropriate air/fuel ratios and nonselective catalytic reduction.

The permittee shall demonstrate compliance with the emission limitations based on the results of emission testing required in section f)(2).

- b. Emission Limitation

- 9.99 E-03 pound PM₁₀/mmBtu

- 5.88 E-04 pound SO₂/mmBtu

- Applicable Compliance Method

The above emission limitations were established in accordance with the emission factors from AP-42 Chapter 3.2: Natural Gas-fired Reciprocating Engines (7/2000).



If required, the permittee shall demonstrate compliance with the PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

c. Emission Limitations: Combined Emission Limitations for P001, P002, P003, and P004

6.63 tons NO_x per rolling, 12-month period

10.50 tons CO per rolling, 12-month period

1.95 tons VOC per rolling, 12-month period

0.18 ton PM₁₀ per rolling, 12-month period

0.01 ton SO₂ per rolling, 12-month period

Applicable Compliance Method

The above emission limitations were established to represent the highest emission levels possible taking into consideration the worst case operating scenario for each pollutant and 3,000 flexible hours of operation for P001 – P004. Based on 3,000 hours of operation per year, the annual emissions for each generator can be calculated, as follows:

For pollutants with emission factors specified in grams/bhp-hour:

gram pollutant ⁽¹⁾ bhp-hour	HP ⁽²⁾	3000 hours ⁽³⁾ year	1 pound ⁽⁴⁾ 453.59 gram	1 ton ⁽⁴⁾ 2000 pounds
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Where:

- (1) Pollutant-specific emission factor, as supplied by permittee.
- (2) Maximum capacity of each generator [P001 = 1475 horsepower; P002 – P004 = 1542 horsepower each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rates.



For pollutants with emission factors specified in pounds/mmBtu:

pound pollutant ⁽¹⁾	mmBtu ⁽²⁾	3000 hours ⁽³⁾	1 ton ⁽⁴⁾
mmBtu	hour	year	2000 pounds

Where:

- (1) Emission factor from AP-42 Chapter 3.2 (7/00).
- (2) Maximum capacity of each generator [P001 = 9.142 mmBtu/hour; P002 – P004 = 11.581 mmBtu/hour each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rate.

Therefore, provided compliance is shown with the gram/bhp-hour and pound/mmBtu limitations and the 12-month, rolling hours of operation restriction, compliance with the annual emission limitations shall also be demonstrated.

d. Emission Limitation

0.062 pound PE/mmBtu

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-11(B)(5)(b). If required, compliance with the emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emission Limitation

Visible PE shall not exceed 20% opacity as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-07(A). If required, compliance with the visible emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for one of the following emissions units: P002; P003; or P004 in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after the issuance of this permit. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency. Future testing requirements shall be



conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: NOx, CO, and VOC.
- c. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

<u>Pollutant</u>	<u>Test Method</u>
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate

Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the



Final Permit-to-Install and Operate

Jay Plastics-Broscho Fab. Prod. Div.

Permit Number: P0110162

Facility ID: 0370010128

Effective Date: 12/21/2012

submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.



4. P003, Co-Generator #2

Operations, Property and/or Equipment Description:

11.581 mmBtu/hour (1475 HP), Natural Gas-Fired, 4-Stroke, Lean-Burn, Spark Ignition, Reciprocating Internal Combustion Engine

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)g. and d)(4)

(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(D)	1.30 grams nitrogen oxides (NOx)/brake horsepower-hour (bhp-hour) 2.06 grams carbon monoxide (CO)/bhp-hour 0.15 gram volatile organic compounds (VOC)/bhp-hour 9.99 E-03 pound particulate matter ≤ 10 microns in size (PM ₁₀)/mmBtu 5.88 E-04 pound sulfur dioxide (SO ₂)/mmBtu <u>Combined Emission Limits for P001, P002, P003, and P004:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		6.63 tons NOx per rolling, 12-month period 10.50 tons CO per rolling, 12-month period 1.95 tons VOC per rolling, 12-month period 0.18 ton PM ₁₀ per rolling 12-month period 0.01 ton SO ₂ per rolling 12-month period See b)(2)a. and c)(1)
b.	OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
c.	OAC rule 3745-17-11(B)(5)(b)	0.062 pound particulate emissions (PE)/mmBtu
d.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-110-03(F)	This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(3).
f.	40 CFR Part 60 (NSPS), Subpart JJJJ	This emissions unit is exempt from the requirements of this rule because its commence construction date is prior to June 12, 2006.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(2) Additional Terms and Conditions

- a. This permit establishes federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and PSD applicability. The following federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. The following emission limitations are for the operation of emissions unit P003, only:
 - (a) 1.30 grams NOx/bhp-hour;
 - (b) 2.06 grams CO/bhp-hour;



- (c) 0.15 gram VOC/bhp-hour;
 - (d) 9.99 E-03 pound PM₁₀/mmBtu; and
 - (e) 5.88 E-04 pound SO₂/mmBtu.
- ii. The following emissions limitations are for the operation of emissions units P001, P002, P003, and P004, combined:
- (a) 6.63 tons NOx per rolling, 12-month period;
 - (b) 10.50 tons CO per rolling, 12-month period;
 - (c) 1.95 tons VOC per rolling, 12-month period;
 - (d) 0.18 ton PM₁₀ per rolling, 12-month period; and
 - (e) 0.01 ton SO₂ per rolling, 12-month period.
- c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. Emissions unit P003 shall be operated with appropriate air/fuel ratios and shall be equipped with nonselective catalytic reduction (NSCR) for the control of NOx, CO, and VOC. The gram/bhp-hour emission limitations for NOx, CO, and VOC were established based on uncontrolled emission factors supplied by the manufacturer of this emission unit and minimum control efficiencies for NOx, CO, and VOC supplied by the permittee, as follows:

	Emission Factor, Supplied by Manufacturer	Minimum Control Efficiency for NSCR, Supplied by Permittee
NOx	13.0 gram/bhp-hour	90%
CO	10.3 gram/bhp-hour	80%
VOC	0.2 gram/bhp-hour	25%

b. The maximum annual operating hours for P001, P002, P003, and P004, combined, shall not exceed 3,000 hours, based upon a rolling, 12-month summation of the operating hours.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit.



- (2) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day this emissions unit is operated, the permittee shall record the total hours of operation.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. the combined operating hours for P001, P002, P003, and P004 on a monthly basis; and
 - b. the rolling, 12-month summation of the combined operating hours for P001, P002, P003 and P004.
 - (3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute"; ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following combined emission limitations for P001, P002, P003, and P004, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 3,000 hours of operation per rolling, 12-month period.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).



If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

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 Limitations

- 1.30 grams NO_x/bhp-hour

- 2.06 grams CO/bhp-hour

- 0.15 gram VOC/bhp-hour

- Applicable Compliance Method

The above emission limitations were established based on emission factors supplied by the manufacturer of this emissions unit and minimum control efficiencies supplied by the permittee [See c)(1)a.]. The emission limitations represent controlled emission rates from the use of appropriate air/fuel ratios and nonselective catalytic reduction.

The permittee shall demonstrate compliance with the emission limitations based on the results of emission testing required in section f)(2).

- b. Emission Limitation

- 9.99 E-03 pound PM₁₀/mmBtu

- 5.88 E-04 pound SO₂/mmBtu

- Applicable Compliance Method

The above emission limitations were established in accordance with the emission factors from AP-42 Chapter 3.2: Natural Gas-fired Reciprocating Engines (7/2000).



If required, the permittee shall demonstrate compliance with the PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

c. Emission Limitations: Combined Emission Limitations for P001, P002, P003, and P004

6.63 tons NO_x per rolling, 12-month period

10.50 tons CO per rolling, 12-month period

1.95 tons VOC per rolling, 12-month period

0.18 ton PM₁₀ per rolling, 12-month period

0.01 ton SO₂ per rolling, 12-month period

Applicable Compliance Method

The above emission limitations were established to represent the highest emission levels possible taking into consideration the worst case operating scenario for each pollutant and 3,000 flexible hours of operation for P001 – P004. Based on 3,000 hours of operation per year, the annual emissions for each generator can be calculated, as follows:

For pollutants with emission factors specified in grams/bhp-hour:

gram pollutant ⁽¹⁾	HP ⁽²⁾	3000 hours ⁽³⁾	1 pound ⁽⁴⁾	1 ton ⁽⁴⁾
bhp-hour		year	453.59 gram	2000 pounds

Where:

- (1) Pollutant-specific emission factor, as supplied by permittee.
- (2) Maximum capacity of each generator [P001 = 1475 horsepower; P002 – P004 = 1542 horsepower each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rates.



For pollutants with emission factors specified in pounds/mmBtu:

pound pollutant ⁽¹⁾	mmBtu ⁽²⁾	3000 hours ⁽³⁾	1 ton ⁽⁴⁾
mmBtu	hour	year	2000 pounds

Where:

- (1) Emission factor from AP-42 Chapter 3.2 (7/00).
- (2) Maximum capacity of each generator [P001 = 9.142 mmBtu/hour; P002 – P004 = 11.581 mmBtu/hour each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rate.

Therefore, provided compliance is shown with the gram/bhp-hour and pound/mmBtu limitations and the 12-month, rolling hours of operation restriction, compliance with the annual emission limitations shall also be demonstrated.

d. Emission Limitation

0.062 pound PE/mmBtu

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-11(B)(5)(b). If required, compliance with the emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emission Limitation

Visible PE shall not exceed 20% opacity as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-07(A). If required, compliance with the visible emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for one of the following emissions units: P002; P003; or P004 in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after the issuance of this permit. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency. Future testing requirements shall be



conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: NOx, CO, and VOC.
- c. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

<u>Pollutant</u>	<u>Test Method</u>
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate

Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the



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Jay Plastics-Broscho Fab. Prod. Div.

Permit Number: P0110162

Facility ID: 0370010128

Effective Date: 12/21/2012

submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.



5. P004, Co-Generator #3

Operations, Property and/or Equipment Description:

11.581 mmBtu/hour (1475 HP), Natural Gas-Fired, 4-Stroke, Lean-Burn, Spark Ignition, Reciprocating Internal Combustion Engine

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)g. and d)(4)

(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(D)	1.30 grams nitrogen oxides (NOx)/brake horsepower-hour (bhp-hour) 2.06 grams carbon monoxide (CO)/bhp-hour 0.15 gram volatile organic compounds (VOC)/bhp-hour 9.99 E-03 pound particulate matter ≤ 10 microns in size (PM ₁₀)/mmBtu 5.88 E-04 pound sulfur dioxide (SO ₂)/mmBtu <u>Combined Emission Limits for P001, P002, P003, and P004:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		6.63 tons NO _x per rolling, 12-month period 10.50 tons CO per rolling, 12-month period 1.95 tons VOC per rolling, 12-month period 0.18 ton PM ₁₀ per rolling 12-month period 0.01 ton SO ₂ per rolling 12-month period See b)(2)a. and c)(1)
b.	OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
c.	OAC rule 3745-17-11(B)(5)(b)	0.062 pound particulate emissions (PE)/mmBtu
d.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-110-03(F)	This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(3).
f.	40 CFR Part 60 (NSPS), Subpart JJJJ	This emissions unit is exempt from the requirements of this rule because its commence construction date is prior to June 12, 2006.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(2) Additional Terms and Conditions

- a. This permit establishes federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and PSD applicability. The following federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. The following emission limitations are for the operation of emissions unit P004, only:
 - (a) 1.30 grams NO_x/bhp-hour;
 - (b) 2.06 grams CO/bhp-hour;



- (c) 0.15 gram VOC/bhp-hour;
 - (d) 9.99 E-03 pound PM₁₀/mmBtu; and
 - (e) 5.88 E-04 pound SO₂/mmBtu.
- ii. The following emissions limitations are for the operation of emissions units P001, P002, P003, and P004, combined:
- (a) 6.63 tons NOx per rolling, 12-month period;
 - (b) 10.50 tons CO per rolling, 12-month period;
 - (c) 1.95 tons VOC per rolling, 12-month period;
 - (d) 0.18 ton PM₁₀ per rolling, 12-month period; and
 - (e) 0.01 ton SO₂ per rolling, 12-month period.
- c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. Emissions unit P004 shall be operated with appropriate air/fuel ratios and shall be equipped with nonselective catalytic reduction (NSCR) for the control of NOx, CO, and VOC. The gram/bhp-hour emission limitations for NOx, CO, and VOC were established based on uncontrolled emission factors supplied by the manufacturer of this emission unit and minimum control efficiencies for NOx, CO, and VOC supplied by the permittee, as follows:

	Emission Factor, Supplied by Manufacturer	Minimum Control Efficiency for NSCR, Supplied by Permittee
NOx	13.0 gram/bhp-hour	90%
CO	10.3 gram/bhp-hour	80%
VOC	0.2 gram/bhp-hour	25%

b. The maximum annual operating hours for P001, P002, P003, and P004, combined, shall not exceed 3,000 hours, based upon a rolling, 12-month summation of the operating hours.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit.



- (2) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day this emissions unit is operated, the permittee shall record the total hours of operation.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. the combined operating hours for P001, P002, P003, and P004 on a monthly basis; and
 - b. the rolling, 12-month summation of the combined operating hours for P001, P002, P003 and P004.
 - (3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute"; ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following combined emission limitations for P001, P002, P003, and P004, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 3,000 hours of operation per rolling, 12-month period.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).



If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

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 Limitations

1.30 grams NO_x/bhp-hour

2.06 grams CO/bhp-hour

0.15 gram VOC/bhp-hour

Applicable Compliance Method

The above emission limitations were established based on emission factors supplied by the manufacturer of this emissions unit and minimum control efficiencies supplied by the permittee [See c)(1)a.]. The emission limitations represent controlled emission rates from the use of appropriate air/fuel ratios and nonselective catalytic reduction.

The permittee shall demonstrate compliance with the emission limitations based on the results of emission testing required in section f)(2).

b. Emission Limitation

9.99 E-03 pound PM₁₀/mmBtu

5.88 E-04 pound SO₂/mmBtu

Applicable Compliance Method

The above emission limitations were established in accordance with the emission factors from AP-42 Chapter 3.2: Natural Gas-fired Reciprocating Engines (7/2000).



If required, the permittee shall demonstrate compliance with the PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

c. Emission Limitations: Combined Emission Limitations for P001, P002, P003, and P004

6.63 tons NO_x per rolling, 12-month period

10.50 tons CO per rolling, 12-month period

1.95 tons VOC per rolling, 12-month period

0.18 ton PM₁₀ per rolling, 12-month period

0.01 ton SO₂ per rolling, 12-month period

Applicable Compliance Method

The above emission limitations were established to represent the highest emission levels possible taking into consideration the worst case operating scenario for each pollutant and 3,000 flexible hours of operation for P001 – P004. Based on 3,000 hours of operation per year, the annual emissions for each generator can be calculated, as follows:

For pollutants with emission factors specified in grams/bhp-hour:

gram pollutant ⁽¹⁾	HP ⁽²⁾	3000 hours ⁽³⁾	1 pound ⁽⁴⁾	1 ton ⁽⁴⁾
bhp-hour		year	453.59 gram	2000 pounds

Where:

- (1) Pollutant-specific emission factor, as supplied by permittee.
- (2) Maximum capacity of each generator [P001 = 1475 horsepower; P002 – P004 = 1542 horsepower each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rates.



For pollutants with emission factors specified in pounds/mmBtu:

pound pollutant ⁽¹⁾	mmBtu ⁽²⁾	3000 hours ⁽³⁾	1 ton ⁽⁴⁾
mmBtu	hour	year	2000 pounds

Where:

- (1) Emission factor from AP-42 Chapter 3.2 (7/00).
- (2) Maximum capacity of each generator [P001 = 9.142 mmBtu/hour; P002 – P004 = 11.581 mmBtu/hour each].
- (3) Restricted, annual hours of operation.
- (4) Conversion rate.

Therefore, provided compliance is shown with the gram/bhp-hour and pound/mmBtu limitations and the 12-month, rolling hours of operation restriction, compliance with the annual emission limitations shall also be demonstrated.

d. Emission Limitation

0.062 pound PE/mmBtu

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-11(B)(5)(b). If required, compliance with the emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emission Limitation

Visible PE shall not exceed 20% opacity as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

This emission limitation was established in accordance with OAC rule 3745-17-07(A). If required, compliance with the visible emission limitation shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for one of the following emissions units: P002; P003; or P004 in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after the issuance of this permit. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency. Future testing requirements shall be



conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: NOx, CO, and VOC.
- c. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

<u>Pollutant</u>	<u>Test Method</u>
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate

Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the



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submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.