



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

6/8/2016

Certified Mail

Mr. Bill Belardo
 The Garland Company, Inc.
 3800 EAST 91ST STREET
 Cleveland, OH 44105

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
 Facility ID: 1318007412
 Permit Number: P0119909
 Permit Type: Renewal
 County: Cuyahoga

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

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

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

If you have any questions regarding your permit, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: CDAQ



Response to Comments

Facility ID:	1318007412
Facility Name:	The Garland Company, Inc.
Facility Description:	Manufacture of asphalt coatings
Facility Address:	3800 EAST 91ST STREET Cleveland, OH 44105 Cuyahoga County
Permit:	P0119909, Permit-To-Install and Operate - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 05/07/2016. The comment period ended on 06/06/2016.	
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

No comments received.



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
The Garland Company, Inc.**

Facility ID:	1318007412
Permit Number:	P0119909
Permit Type:	Renewal
Issued:	6/8/2016
Effective:	6/8/2016
Expiration:	9/11/2019



**Division of Air Pollution Control
Permit-to-Install and Operate**

for
The Garland Company, Inc.

Table of Contents

Authorization	1
A. Standard Terms and Conditions	4
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	5
2. Who is responsible for complying with this permit?	5
3. What records must I keep under this permit?	5
4. What are my permit fees and when do I pay them?.....	5
5. When does my PTIO expire, and when do I need to submit my renewal application?	5
6. What happens to this permit if my project is delayed or I do not install or modify my source?	6
7. What reports must I submit under this permit?	6
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?	6
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	6
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	7
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	7
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	7
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	8
15. What happens if a portion of this permit is determined to be invalid?	8
B. Facility-Wide Terms and Conditions.....	9
C. Emissions Unit Terms and Conditions	11
1. P002, Membrane Line No. 1	12
2. P012, Mixer 10 - Coatings Department	24
3. Emissions Unit Group - Coatings Operation: P003, P004, P005, P006, P007, P008, P009, P010, and P011	30
4. Emissions Unit Group - Storage Tanks: T001, T002	38



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

Authorization

Facility ID: 1318007412
Application Number(s): A0054405, A0054889
Permit Number: P0119909
Permit Description: FEPTIO renewal permit for Saturator Line No. 1 (P002), 10 mixing tanks (P003-P012), and two heated fixed roof asphalt storage tanks (T001-T002).
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 6/8/2016
Effective Date: 6/8/2016
Expiration Date: 9/11/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

The Garland Company, Inc.
3800 EAST 91ST STREET
Cleveland, OH 44105

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

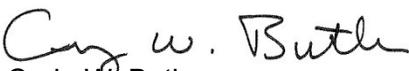
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erievue Plaza
Cleveland, OH 44114
(216)664-2297

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


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0119909
 Permit Description: FEPTIO renewal permit for Saturator Line No. 1 (P002), 10 mixing tanks (P003-P012), and two heated fixed roof asphalt storage tanks (T001-T002).

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

- | | |
|-----------------------------------|--------------------------------|
| Emissions Unit ID: | P002 |
| Company Equipment ID: | Membrane Line No. 1 |
| Superseded Permit Number: | P0115867 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P012 |
| Company Equipment ID: | Mixer 10 - Coatings Department |
| Superseded Permit Number: | P0104934 |
| General Permit Category and Type: | Not Applicable |

Group Name: Coatings Operation

Emissions Unit ID:	P003
Company Equipment ID:	Mixer 1 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	Mixer 2 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P005
Company Equipment ID:	Mixer 3 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P006
Company Equipment ID:	Mixer 4 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P007
Company Equipment ID:	Mixer 5 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P008
Company Equipment ID:	Mixer 6 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P009
Company Equipment ID:	Mixer 7 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P010
Company Equipment ID:	Mixer 8 - Coatings Department
Superseded Permit Number:	P0104934
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P011
Company Equipment ID:	Mixer 9 - Coatings Department



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

Superseded Permit Number:	P0104934
General Permit Category andType:	Not Applicable

Group Name: Storage Tanks

Emissions Unit ID:	T001
Company Equipment ID:	Asphalt Tank 1
Superseded Permit Number:	P0107340
General Permit Category andType:	Not Applicable
Emissions Unit ID:	T002
Company Equipment ID:	Asphalt Tank 2
Superseded Permit Number:	P0107340
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

very important that you submit a complete renewal permit application (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 of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] 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 submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart AAAAAAA, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing. At this time, the Ohio EPA is not accepting delegation for area sources subject to the Maximum Achievable Control Technology NESHAP (MACT) rules. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. Region 5. 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://www.ecfr.gov/> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

C. Emissions Unit Terms and Conditions

1. P002, Membrane Line No. 1

Operations, Property and/or Equipment Description:

Membrane Line No. 1 for production of smooth- and mineral-faced asphalt roll roofing; consists of let-off accumulator, saturator, coater, finished goods accumulator, winder, palletizer, (2) asphalt mixers, rubber/filler blend station, (2) rubber/filler applicator hoppers and mineral applicator hoppers (with recycling units), and equipped with baghouse.

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. d)(3)-(6) and e)(3).

(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) (Established by PTI 13-04047, 7/10/2003)	Particulate Emissions (PE) shall not exceed 1.07 lbs/hr and 4.7 tons per year (TPY). Volatile Organic Compound (VOC) emissions shall not exceed 3.5 lbs/hr and 15.3 TPY. The requirements of this rule include compliance with 40 CFR Part 60, Subpart UU.
b.	OAC rule 3745-17-07(A)(1)	The requirements of this rule are equivalent to the requirements of 40 CFR Part 60, Subpart UU.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)	The requirements of this rule are less stringent than the requirements pursuant to 40 CFR Part 60, Subpart UU.
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-11	The requirements of this rule are less stringent than the requirements pursuant to 40 CFR Part 60, Subpart UU.
f.	40 CFR Part 60, Subpart UU	See b)(2)c. ,b)(2)d. and d)(9) below.
g.	ORC rule 3704.03(F)(4)(c)	See d)(3) through d)(6) and e)(3) below.

(2) Additional Terms and Conditions

- a. Fugitive emissions from mineral handling are controlled by minimizing the height of the bags and super sacks (containing raw materials) over the hoppers when transferring material.
- b. The permittee shall submit a new application and be issued a new permit if a new process material is to be used that would cause the emissions unit to exceed the permitted potential to emit established in this permit.
- c. The permittee shall comply with the particulate emissions limitation required under the following Section of 40 CFR Part 60, Subpart UU:

60.472(a)(1)(i)	0.04 kg/Mg (0.08 lb/ton) of mineral-surfaced roll roofing produced.
60.472(a)(1)(ii)	0.04 kg/Mg (0.08 lb/ton) of smooth-surfaced roll roofing produced.

- d. The permittee shall comply with the opacity limitations required under the following Section of 40 CFR Part 60, Subpart UU:

60.472(a)(2)	Visible emissions from the saturator shall not exceed 20 percent opacity.
60.472(a)(3)	Visible emissions from the saturator capture system shall not exceed 20 percent opacity for any period of consecutive valid observations totaling 60 minutes.

60.472(d)	Emissions from mineral handling shall not exceed 1 percent opacity.
-----------	---

e. The emissions from this emissions unit shall be vented to the baghouse at all times when processing any material containing coal tar pitch.

c) Operational Restrictions

(1) The permittee shall install and operate a dry filtration system for the control of particulate emissions when processing any materials containing coal tar pitch and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records, in tons per hour, of the mineral-surfaced roll roofing products, smooth-surfaced roll roofing products, and coal tar pitch containing products produced in this emissions unit.

(2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

- (3) The permit-to-install and operate (PTIO) application for this emissions unit, P002, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values or Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: Stoddard Solvent
TLV (mg/m³): 572.60
Maximum Hourly Emission Rate (lbs/hr): 3.5
Predicted 1-Hour Maximum Ground Level Concentration (µg/m³): 205.38
MAGLC (µg/m³): 13,633.26

The permittee, has demonstrated that emissions of Stoddard Solvent, from emissions unit(s) P002, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), “that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- (7) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2.5 to 10 inches of water.
- (8) The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. Whenever the baghouse is in operation to control coal tar pitch containing product emissions, the permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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



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

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

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

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

- (9) The permittee shall comply with the monitoring of operations as required under the following section of 40 CFR Part 60, Subpart UU:

60.473(a)	Continuously monitor and record the temperature of the gas at the inlet of the control device.
-----------	--

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall

cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(2):
 - a. all days during which any visible particulate emissions were observed from the stack(s) serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive particulate emissions.
- (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration, in the Annual PER. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was processing material containing coal tar pitch and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in d)(8) where a prompt investigation was not conducted;
 - d. each incident of deviation described in d)(8) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in d)(8) where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

f) Testing Requirements



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

a. Emission Limitation:

Particulate Emissions shall not exceed 1.07 lbs/hr and 4.7 TPY.

Applicable Compliance Method:

The hourly emission rate was calculated based upon the following calculation:

$$(0.08 \text{ lb PM/ton roofing}) * (\text{production rate tons roofing/hr}) = \text{lbs PM/hr}$$

Where:

0.08 lb PM/ton roofing = NSPS limits for mineral-surfaced roofing and smooth surfaced roofing; and

The production rate (ton/hr) shall be determined by d)(1).

Compliance with the annual emission limitation shall be assumed provided compliance is maintained with the short term emission limitation.

b. Emission Limitation:

VOC emissions shall not exceed 3.5 lbs/hr and 15.3 TPY.

Applicable Compliance Method:

Compliance will be based upon the following calculation:

$$(0.26 \text{ lb VOC/ton roofing}) * (\text{maximum production ton/hr}) = \text{lbs VOC/hr}$$

Where:

0.26 lb VOC/ton roofing = the emission factor from "Compilation of Air Pollutant Emission Factors," AP-42, Fifth Edition (01/95), Table 11.2-4; and

The production rate (ton/hr) shall be determined by d)(1).

Compliance with the annual emission limitation shall be assumed provided compliance is maintained with the short term emission limitation.

c. Emission Limitation:

60.472(a)(2)	Less than 20% opacity for exhaust gases.
--------------	--

Applicable Compliance Method:

Compliance shall be determined using U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

60.472(a)(3)	Visible emissions from the saturator capture system(s) shall not exceed more than 20% of any period of consecutive valid
--------------	--



	observations totaling 60 minutes.
--	-----------------------------------

Applicable Compliance Method:

60.474(d)	Method 22, modified so that the readings are recorded every 15 seconds for a period of consecutive observations totaling 60 minutes.
-----------	--

e. Emission Limitation:

60.472(d)	Less than 1% opacity for mineral handling emissions.
-----------	--

Applicable Compliance Method:

Compliance shall be determined using U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitations:

60.472(a)(1)(i)	0.04 kg/Mg (0.08 lb/ton) of mineral-surfaced roll roofing produced.
60.472(a)(1)(ii)	0.04 kg/Mg (0.08 lb/ton) of smooth-surfaced roll roofing produced.

Applicable Compliance Method:

Compliance shall be demonstrated using the test methods and procedures outlined in 40 CFR Part 60, Subpart UU:

60.474(a)(1)	Tests shall be conducted while 106.6 kg (235 lb) shingle is being produced.
60.474(a)(2)	Tests shall be conducted while 6.8 kg (15 lb) felt is being produced.
60.474(b)	Test methods and procedures.
60.474(c)	Equation for calculating the emission rate of particulate matter for each run.

- (2) The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulates in the exhaust stream.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For Particulate Emissions, Method 5A of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).
- f. Personnel from the Cleveland DAQ 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 Cleveland DAQ 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 Cleveland DAQ.

g) Miscellaneous Requirements

- (1) The permittee has requested a modification to PTIO P0107340, for emissions unit P002 (saturator line) to process new coal tar pitch blend material. The new material will generate higher levels of particulate emissions than currently utilized process materials. Control equipment (filter baghouse) will be installed to control PE while processing coal tar pitch containing material. The permittee has requested that permit emissions limitations remain the same. Additionally, the permittee has requested an operational restriction (see c)(1)) above to only utilize the control equipment when processing coal tar pitch containing material.
- (2) Emission testing was conducted on 10/21/2015 to satisfy requirement of testing within 6 months of permit renewal as specified in f)(2)a. above. An average emissions rate of <0.011 lb PM/hr (controlled) was determined.
- (3) This emissions unit was installed in 2001.



Final Permit-to-Install and Operate

The Garland Company, Inc.

Permit Number: P0119909

Facility ID: 1318007412

Effective Date: 6/8/2016

- (4) Superseded permits include: P0094723, issued final on 10/19/2009; P0107340, issued final on 1/4/2011; and, P0115867, issued final on 12/19/2013.

2. P012, Mixer 10 - Coatings Department

Operations, Property and/or Equipment Description:

Mixer 10 - 150-gal mixing tank for the production of roof sealants and coatings.

- 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)(2)d.
 - (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. b)(1)a., b)(2)a.-b., d)(1)-(3), e)(1), and f)(1)a.-b.
- 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) (Synthetic Minor to avoid Title V)	Volatile organic compound (VOC) emissions for P003-P012 shall not exceed 43.65 tons per year (tpy) based on a rolling, 12-month summation. See b)(2)a. and b. below.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.
c.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) must be employed to sufficiently minimize or eliminate visible emissions of fugitive dust.

- (2) Additional Terms and Conditions
 - a. The emissions of VOC from the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 shall not exceed 43.65 tons per year, based upon a rolling, 12-month summation of the VOC emissions.
 - b. The maximum annual coating production level for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 shall not exceed 9,000,000 pounds per year, based upon a rolling, 12-month summation of the coating production figures.
 - c. The requirements of OAC rule 3745-21-07(M) do not apply to the emissions unit because the VOC emissions are uncontrolled and the process does not involve any baking or heat curing.
- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record the following information each month for the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the name and identification of each batch of coating produced;
 - b. the amount of each coating produced, in pounds;
 - c. the rolling, 12-month summation of the coating production figures, in pounds;
 - d. the VOC emissions from each coating produced, in pounds or tons, calculated by multiplying the pounds of coating produced by an emissions factor of 0.97% (Garland Lab Mass Balance Study, 01/09); or by an emissions factor established by the most recent stack test;
 - e. the updated rolling, 12-month summation of the total combined VOC emissions from all coatings produced, in pounds (This shall include the information for the current month and the preceding eleven months.); and
 - f. the rolling, 12-month summation of the VOC emissions, in tons.
 - (2) The permittee shall maintain monthly records of the following information for the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the VOC emission rate for each month of operations; and
 - b. the rolling 12-month summation of VOC emissions.

- (3) The permittee shall maintain monthly records of the following information for the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the coating production figure for each month; and
 - b. the rolling, 12-month summation of the coating production figures.
- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 that identify:
 - a. all deviations (excursions) of the following emission limitations, 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. all exceedances of the rolling, 12-month emission limitation for VOC; and
 - ii. all exceedances of the rolling, 12-month coating production level limitation.
- 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 CDAQ.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(4) above:
 - a. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.
- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
VOC emissions, for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012, shall not exceed 43.65 tons/rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined by the record keeping and reporting specified in d) and e) above.



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

- b. Emission Limitation:
Maximum annual production, for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012, shall not exceed 9,000,000 pounds per year, based upon a rolling, 12-month summation of the coating production figures.

Applicable Compliance Method:

Compliance shall be determined by the record keeping and reporting specified in d) and e) above.

- c. Emission Limitation:
Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

- (1) This emissions unit was installed in 1940.
- (2) Superseded permits include: P0104934, issued final on 12/6/2010.



3. Emissions Unit Group - Coatings Operation: P003, P004, P005, P006, P007, P008, P009, P010, and P011

EU ID	Operations, Property and/or Equipment Description
P003	Mixer 1 - 370-gal mixing tank for the production of roof sealants and coatings.
P004	Mixer 2 - 500-gal mixing tank for the production of roof sealants and coatings.
P005	Mixer 3 - 500-gal mixing tank for the production of roof sealants and coatings.
P006	Mixer 4 - 2,000-gal mixing tank for the production of roof sealants and coatings.
P007	Mixer 5 - 563-gal mixing tank for the production of roof sealants and coatings.
P008	Mixer 6 - 519-gal mixing tank for the production of roof sealants and coatings.
P009	Mixer 7 - 286-gal mixing tank for the production of roof sealants and coatings.
P010	Mixer 8 - 229-gal mixing tank for the production of roof sealants and coatings.
P011	Mixer 9 - 260-gal mixing tank for the production of roof sealants and coatings.

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)(2)e.

(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. b)(1)a., b)(2)a.-b., d)(1)-(3), e)(1), and f)(1)a.-b.

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) (Synthetic Minor to avoid Title V)	Volatile organic compound (VOC) emissions for P003-P012 shall not exceed 43.65 tons per year (tpy) based on a rolling, 12-month summation.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a., and b. below.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a three-minute average.
d.	OAC rule 3745-17-08(B)(3)	Reasonably available control measures (RACM) must be employed to sufficiently minimize or eliminate visible emissions of fugitive dust. See b)(2)c. below.
e.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) shall not exceed 0.551 pound per hour (lb/hr).

(2) Additional Terms and Conditions

- a. The emissions of VOC from the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 shall not exceed 43.65 tons per year, based upon a rolling, 12-month summation of the VOC emissions.
- b. The maximum annual coating production level for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 shall not exceed 9,000,000 pounds per year, based upon a rolling, 12-month summation of the coating production figures.
- c. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from this emissions unit shall meet the following requirements:
 - i. the collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
 - ii. the control equipment for this emissions unit shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions (whichever is less stringent) from the exhaust stack of this emissions unit.

- d. The requirements of OAC rule 3745-21-07(M) do not apply to the emissions unit because the VOC emissions are uncontrolled and the process does not involve any baking or heat curing.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the name and identification of each batch of coating produced;
 - b. the amount of each coating produced, in pounds;
 - c. the rolling, 12-month summation of the coating production figures, in pounds;
 - d. the VOC emissions from each coating produced, in pounds or tons, calculated by multiplying the pounds of coating produced by an emissions factor of 0.97% (Garland Lab Mass Balance Study, 01/09); or by an emissions factor established by the most recent stack test;
 - e. the updated rolling, 12-month summation of the total combined VOC emissions from all coatings produced, in pounds (This shall include the information for the current month and the preceding eleven months.); and
 - f. the rolling, 12-month summation of the VOC emissions, in tons.
 - (2) The permittee shall maintain monthly records of the following information for the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the VOC emission rate for each month of operations; and
 - b. the rolling, 12-month summation of VOC emissions.
 - (3) The permittee shall maintain monthly records of the following information for the emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012:
 - a. the coating production figure for each month; and
 - b. the rolling, 12-month summation of the coating production figures.
 - (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012 that identify:
 - a. all deviations (excursions) of the following emission limitations, 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. all exceedances of the rolling, 12-month emission limitation for VOC; and
 - ii. all exceedances of the rolling, 12-month coatings production level limitation.
 - 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 CDAQ.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(4) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive particulate emissions.
- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
VOC emissions, for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012, shall not exceed 43.65 tons/rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined by the record keeping and reporting specified in d) and e) above.

The permittee shall conduct emissions testing in accordance with f)(2) to determine an emissions factor for calculating VOC emissions.
 - b. Emission Limitation:
Maximum annual production, for emissions units P003, P004, P005, P006, P007, P008, P009, P010, P011, and P012, shall not exceed 9,000,000 pounds per



year, based upon a rolling, 12-month summation of the coating production figures.

Applicable Compliance Method:

Compliance shall be determined by the record keeping and reporting specified in d) and e) above.

c. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible particulate emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitation:

The controlled emissions from the stack shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases **or** there shall be no visible emissions from the exhaust stack.

Applicable Compliance Method:

If required, compliance with the requirement for no visible particulate emissions from the exhaust stack, identified in this permit, shall be determined in accordance with U.S. EPA Method 22. If opting to comply with the outlet particulate emissions rate, compliance with the 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases from the stack shall be determined in accordance with U.S. EPA Methods 1 through 5, as appropriate.

e. Emission Limitation:

PE shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by using the following equation:

$$E = (B) * (EF) * (100\% - CE) * (1 \text{ day/operating hours})$$

where,

E = emissions rate, lb/hr

B = number of batches per day, batches/day

EF = uncontrolled PE emissions factor, 2.03 lb/batch (Garland Mass Balance Study, 1/14/2009)

CE = control efficiency, $(99\% * 99.5\%) / (100\%) = 98.50\%$

If required by the Ohio EPA or CDAQ, compliance with the allowable particulate emissions limit shall be determined in accordance with U.S. EPA Reference Methods 1 through 5 or 40 CFR Part 60, Appendix A.

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 3 months after issuance of the permit.
 - b. The emission testing shall be conducted to demonstrate pounds VOC per pounds of material produced.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 25 or Method 25A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while at least two or more of the emissions units from this emissions units group (Coatings Operation) are operating at or near its maximum capacity and producing the material with the highest VOC content, unless otherwise specified or approved by the CDAQ.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CDAQ. 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 CDAQ's refusal to accept the results of the emission test(s).
 - f. Personnel from the CDAQ 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 CDAQ 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 CDAQ.



Final Permit-to-Install and Operate
The Garland Company, Inc.
Permit Number: P0119909
Facility ID: 1318007412
Effective Date: 6/8/2016

g) Miscellaneous Requirements

- (1) These emissions unit were installed in 1940.
- (2) Superseded permits include: P0104934, issued final on 12/6/2010.

4. Emissions Unit Group - Storage Tanks: T001, T002

EU ID Operations, Property and/or Equipment Description

T001	7,500 Gal. Storage Tank For Asphalt.
T002	7,500 Gal. Storage Tank For Asphalt.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
- (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
- a. None.
- (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
- a. None.
- b) **Applicable Emissions Limitations and/or Control Requirements**
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (Established by PTI 13-1606, 10/16/86)	Maintain true vapor pressure less than 1.52 psia.
b.	OAC rule 3745-17-07(B)	The requirements of this rule are less stringent than the requirements pursuant to 40 CFR Part 60, Subpart UU. See b)(2)c. below.
c.	OAC rule 3745-17-08(B)	The requirements of this rule are equivalent to the requirements pursuant to 40 CFR Part 60, Subpart UU. See b)(2)c. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-21-09(L)	Exempt, see b)(2)a. below.
e.	OAC rule 3745-21-21(E)(2)	See b)(2)b. and d)(3). below.
f.	40 CFR Part 60, Subpart UU	See b)(2)c. below.

(2) Additional Terms and Conditions

- a. The storage tank has a capacity less than 40,000 gallons.
- b. A storage tank with a design capacity less than 40,000 is subject to no provisions of this rule other than those required by maintaining readily accessible records of the dimensions of the storage tank and analysis of the capacity of the storage tank.
- c. The permittee shall comply with the visible emissions limitation required under the following section of 40 CFR Part 60, Subpart UU:

60.472(c)	0 percent opacity from asphalt storage tank exhaust gases except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.
-----------	---

c) Operational Restrictions

- (1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid that, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless the tank is equipped with an internal floating roof (or equivalent control approved by the Cleveland Division of Air Quality (CDAQ)) in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09 prior to storing a petroleum liquid with a higher vapor pressure.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the following information for the fixed roof tank:
 - a. the types of petroleum liquids stored in the tank;
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.52 pound per square inch absolute; and
 - c. the annual VOC emissions from all VOC material stored in this emission unit shall be calculated using U.S. EPA's TANKS 4.0 (or later version software program).

These records shall be maintained for at least 5 years and shall be made available to the CDAQ upon verbal or written request.

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions from the tank. The presence or absence of any emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

- (3) The permittee shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available to the CDAQ upon verbal or written request:
 - a. the dimension of the storage vessel; and
 - b. an analysis of the capacity of the storage vessel.
- e) Reporting Requirements
 - (1) If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure that is greater than 1.52 pounds per square inch absolute the permittee shall notify the CDAQ within 30 days of becoming aware of the occurrence.
 - a. The date that such petroleum liquid was first stored in the tank;

- b. the date removed (if removed);
 - c. the total gallons throughput of each petroleum liquid exceeding this vapor pressure; and
 - d. the proposed method of compliance shall be included in the report.
- (2) The permittee shall identify the following information in the Annual PER in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
- a. all days during which any visible emissions were observed from the tank; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (3) Annual PER forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
 Maintain true vapor pressure less than 1.52 psia.

Applicable Compliance Method:
 Compliance shall be demonstrated by the record keeping and reporting outlined in Sections d)(1) and e)(1) above.

b. Emission Limitation:

60.472(c)	0 percent opacity from asphalt storage tank exhaust gases except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.
-----------	---

c. Applicable Compliance Method:
 Compliance shall be determined using U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) Superseded permits include: P0094723, issued final on 10/19/2009; and, P0107340, issued final on 1/4/2011.