



11/8/2013

Certified Mail

Mr. Brian Keyser
Johns Manville-Milan Plant
49 Lockwood Road
Milan, OH 44846

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0322002004
Permit Number: P0114980
Permit Type: Administrative Modification
County: Erie

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/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.

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



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Johns Manville-Milan Plant**

Facility ID:	0322002004
Permit Number:	P0114980
Permit Type:	Administrative Modification
Issued:	11/8/2013
Effective:	11/8/2013
Expiration:	4/20/2021



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

for
Johns Manville-Milan Plant

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit?	4
3. What records must I keep under this permit?	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application?	4
6. What happens to this permit if my project is delayed or I do not install or modify my source?	5
7. What reports must I submit under this permit?	5
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?	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	6
13. Can I transfer this permit to a new owner or operator?.....	6
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	7
15. What happens if a portion of this permit is determined to be invalid?	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions	10
1. P001, SS1; M1; and E1.....	11
2. P002, C1 and E2.....	19
3. P003, D1 and A1.....	23



Final Permit-to-Install and Operate
Johns Manville-Milan Plant
Permit Number: P0114980
Facility ID: 0322002004
Effective Date: 11/8/2013

Authorization

Facility ID: 0322002004
Application Number(s): M0002226
Permit Number: P0114980
Permit Description: Administrative modification to reflect facility operations based on the maximum hourly throughput and/or capacity of facility equipment and operations. In addition, this permit includes applicable air modeling for HAPs.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 11/8/2013
Effective Date: 11/8/2013
Expiration Date: 4/20/2021
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Johns Manville-Milan Plant
49 Lockwood Rd
Milan, OH 44846

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



Final Permit-to-Install and Operate
Johns Manville-Milan Plant
Permit Number: P0114980
Facility ID: 0322002004
Effective Date: 11/8/2013

Authorization (continued)

Permit Number: P0114980
Permit Description: Administrative modification to reflect facility operations based on the maximum hourly throughput and/or capacity of facility equipment and operations. In addition, this permit includes applicable air modeling for HAPs.

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

Emissions Unit ID:	P001
Company Equipment ID:	SS1, M1, E1
Superseded Permit Number:	P0107737
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	C1, E2
Superseded Permit Number:	P0107737
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	D1, A1
Superseded Permit Number:	P0107737
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Johns Manville-Milan Plant
Permit Number: P0114980
Facility ID: 0322002004
Effective Date: 11/8/2013

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
Johns Manville-Milan Plant
Permit Number: P0114980
Facility ID: 0322002004
Effective Date: 11/8/2013

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Johns Manville-Milan Plant

Permit Number: P0114980

Facility ID: 0322002004

Effective Date: 11/8/2013

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
Johns Manville-Milan Plant
Permit Number: P0114980
Facility ID: 0322002004
Effective Date: 11/8/2013

C. Emissions Unit Terms and Conditions



1. P001, SS1; M1; and E1

Operations, Property and/or Equipment Description:

EPDM Rubber Roofing Line: batch preparation (SS1), mixing (M1), extruding, and pelletizing (E1)

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)f., d)(2) through d)(5), and e)(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(F)	0.01 grains particulate matter of 10 microns or less in size (PM ₁₀)/dry standard cubic feet (dscf), 9.01 tons PM ₁₀ /year (Baghouse M1) There shall be no visible particulate emissions (PE) from the stack serving Baghouse M1. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), effective 11/30/2001	0.38 pound volatile organic compounds (VOC)/hour and 1.66 tons VOC/year See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), effective 12/1/2006	See b)(2)d.
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-114-01, ORC rule 3704.03(F)(b)	See d)(2) through d)(5) and e)(2).

(2) Additional Terms and Conditions

- a. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:
 - i. The particulate emission rates from Baghouse M1 which controls the batch preparation and mixing operations associated with this emissions unit shall be limited to 0.01 gr PM₁₀/dscf and 9.01 tons PM₁₀/year.
 - ii. There shall be no visible PE from the stack serving Baghouse M1.
- b. The particulate emissions from the main extruder associated with this emissions unit are controlled by Baghouse E1; however, the emissions prior to control are negligible. Therefore, no emission limitation has been established in this permit and the use of Baghouse E1 has not been established as a BAT requirement.

The uncontrolled potential to emit of PM₁₀ is 2.12E⁻⁴ pound/hour and 9.28E⁻⁴ ton/year, as calculated using the following equation:

$$\frac{1.513E^{-8} \text{ lb PM}_{10}^{(1)}}{\text{lb rubber extruded}} \quad \left| \quad \frac{\text{lbs rubber extruded}^{(2)}}{\text{hour}} \right.$$

⁽¹⁾ AP-42 Chapter 4.12 (Draft 11/08) emission factor for compound #9.

⁽²⁾ Maximum hourly production rate supplied by the company in the permit application.

- c. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with emission limitations contained in b)(1)b. and compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [see b)(2)a.].

The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, for two specific purposes as indicated below:

- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with the voluntary restrictions;



- ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [see b)(2)d.].

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC and PM₁₀ emissions from this air contaminant source since:

- i. the uncontrolled PTE of VOC is less than 10 tons per year; and
- ii. the controlled PTE of PM₁₀ is less than 10 tons per year, taking into consideration practically and legally enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

- e. The uncontrolled mass rate of emissions (UMRE) of PE from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

- f. This emissions unit is exempt from the visible emission limitation specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c) **Operational Restrictions**

- (1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)a.]:

- a. Baghouse M1 which controls the batch preparation and mixing operations shall be vented to a baghouse capable of achieving a maximum outlet concentration not to exceed 0.01 gr/dscf for PM₁₀.



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

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the Baghouse M1 exhaust serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

- (2) The permit-to-install and operate (PTIO) application for this emissions unit, P001, 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 air dispersion model SCREEN3. 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 for 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., "X" hours per day and "Y" 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: Carbon Disulfide

TLV (mg/m³): 10

Maximum Hourly Emission Rate (lbs/hr): 0.39

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 279.5

MAGLC (ug/m³): 741.5

Toxic Contaminant: Carbonyl Sulfide

TLV (mg/m³): 5

Maximum Hourly Emission Rate (lbs/hr): 0.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 221.1

MAGLC (ug/m³): 292.6

The permittee, has demonstrated that emissions of Carbon Disulfide and Carbonyl Sulfide, from emissions unit P001, 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).

- (3) 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/their 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.

- (4) 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.

- (5) 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

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)(1) above:

- a. all visible emission checks during which any visible PE were observed from the Baghouse M1 exhaust serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible PE.
- (2) 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 Permit Evaluation Report (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.

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:

0.38 pound VOC/hour

- Applicable Compliance Method:

The hourly emission limitation was established based on the following calculation:

$1.470E^{-5} \text{ lb VOC}^{(1)}$	lbs rubber mixed ⁽²⁾	+	$1.240E^{-5} \text{ lb VOC}^{(3)}$	lbs rubber extruded ⁽²⁾
lb rubber mixed	hour		lb rubber extruded	hour

⁽¹⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for mixing compound #8.
⁽²⁾ Maximum hourly production rates supplied by the company in the permit application.
⁽³⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for extruding compound #9.



If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

b. Emission Limitation:

1.66 tons VOC/year

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly limitation by the maximum operating schedule of 8,760 hours/year and then dividing by 2,000 pounds/ton. Therefore, provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

0.01 gr PM₁₀/dscf, 9.01 tons PM₁₀/year

Applicable Compliance Method:

The maximum outlet concentration for the baghouse serving this emissions unit has been determined to be 0.01 gr PM₁₀/dscf. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The ton/year limitation was established by multiplying the maximum outlet concentration of 0.01 gr PM₁₀/dscf by a maximum volumetric air flow of 24,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1 acfm, and 60 minutes/hour and multiplying by 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum outlet concentration limitation, compliance with the annual limitation shall also be demonstrated.

d. Emission Limitation:

There shall be no visible particulate emissions from the Baghouse M1 exhaust.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



2. P002, C1 and E2

Operations, Property and/or Equipment Description:

EPDM Rubber Roofing Line: calendaring (C1) and extrusion (E2) line (2 calenders and 2 extruders)

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)e. and d)(1).

(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), effective 11/30/2001	0.96 pound volatile organic compounds (VOC)/hour and 4.19 tons VOC/year See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), effective 12/1/2006	See b)(2)c.
c.	OAC rule 3745-17-11(B)	See b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-114-01, ORC rule 3704.03(F)(b)	See d)(1).

(2) Additional Terms and Conditions

a. The particulate emissions of ten microns or less in size (PM₁₀) generated from the extruders associated with this emissions unit are negligible. Therefore, no emission limitation has been established in this permit.



The uncontrolled potential to emit (PTE) of PM₁₀ from the extruders is 2.12E⁻⁴ pound/hour and 9.28E⁻⁴ ton/year, as calculated using the following equation:

$$\frac{1.513E^{-8} \text{ lb PM}_{10}^{(1)}}{\text{lb rubber extruded}} \times \frac{\text{lbs rubber extruded}^{(2)}}{\text{hour}}$$

⁽¹⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for compound #9.

⁽²⁾Maximum hourly production rate supplied by the company in the permit application.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit for VOC.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

Until this rule revision is approved by the U.S. EPA, BAT requirements have been determined to be compliance with the emission limitations contained in b)(1)a.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC emissions from this air contaminant source because the uncontrolled potential to emit of VOC is less than 10 tons per year.

- d. The uncontrolled mass rate of emissions (UMRE) of PE from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.
- e. This emissions unit is exempt from the visible emission limitation specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c) Operational Restrictions

- (1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA’s “e-Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.

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:

0.96 pound VOC/hour

Applicable Compliance Method:

The hourly emission limitation was established based on the following calculation:

$5.587E^{-5}$ lb VOC ⁽¹⁾	lbs rubber calendered ⁽²⁾		$1.240E^{-5}$ lb VOC ⁽³⁾	lbs rubber extruded ⁽²⁾
lb rubber calendered	hour	+	lb rubber extruded	hour

⁽¹⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for calendering compound #2.

⁽²⁾ Maximum hourly production rates supplied by the company in the permit application.

⁽³⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for extruding compound #9.



Final Permit-to-Install and Operate

Johns Manville-Milan Plant

Permit Number: P0114980

Facility ID: 0322002004

Effective Date: 11/8/2013

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

b. Emission Limitation:

4.19 tons VOC/year

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly limitation by the maximum operating schedule of 8,760 hours/year and then dividing by 2,000 pounds/ton. Therefore, provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.



3. P003, D1 and A1

Operations, Property and/or Equipment Description:

EPDM Rubber Roofing Line: sheet fabrication, including dusting (D1), curing (A1-2 autoclaves), winding, and bagging operations

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)f. 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(F)	0.002 pound particulate matter of 10 microns or less in size (PM ₁₀)/hour and 0.01 ton PM ₁₀ /year (Baghouse D1) There shall be no visible particulate emissions (PE) from the stack serving Baghouse D1. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), effective 11/30/2001	6.06 pounds volatile organic compounds (VOC)/hour and 8.15 tons VOC/year See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), effective 12/1/2006	See b)(2)c.
d.	OAC rule 3745-17-11(B)	See b)(2)d.
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	OAC rule 3745-114-01, ORC rule	See d)(2).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	3704.03(F)(b)	

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

- i. The particulate emission rates from Baghouse D1 which controls the narrow and wide dusting operations associated with this emissions unit shall be limited to 0.002 pound PM₁₀/hour and 0.01 ton PM₁₀/year.
- ii. There shall be no visible PE from the stack serving Baghouse D1.

All emissions of particulate matter from Baghouse D1 are PM₁₀.

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with emission limitations contained in b)(1)b. and compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [see b)(2)a.].

The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, for two specific purposes as indicated below:

- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with the voluntary restrictions;
- ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [see b)(2)c.].

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.



It should be noted that the requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC and PM₁₀ emissions from this air contaminant source since:

- i. the uncontrolled PTE of VOC is less than 10 tons per year; and
- ii. the controlled PTE of PM₁₀ is less than 10 tons per year, taking into consideration practically and legally enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

- d. The uncontrolled mass rate of emissions (UMRE) of PE from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

- e. This emissions unit is exempt from the visible emission limitation specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c) **Operational Restrictions**

- (1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)a.]:

- a. Baghouse D1 which controls the narrow and wide dusting operations shall be capable of achieving a particulate control efficiency of 99%.

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

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the Baghouse D1 exhaust serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. the total duration of any visible emission incident; and
- c. any corrective actions taken to eliminate the visible emissions.

- (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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

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)(1) above:

- a. all visible emission checks during which any visible PE were observed from the Baghouse D1 exhaust serving this emissions unit; and
- b. any corrective actions taken to eliminate the visible PE.

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:

6.06 pounds VOC/hour

Applicable Compliance Method:

The hourly emission limitation was established based on the following calculation:

6.647E-5 lb VOC ⁽¹⁾	lbs rubber autoclaved ⁽²⁾	2 Autoclaves
lb rubber autoclaved	hour	

⁽¹⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for curing/autoclaving compound #8.



⁽²⁾Maximum hourly production rates supplied by the company in the permit application.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

b. Emission Limitation:

8.15 tons VOC/year

Applicable Compliance Method:

The annual limitation was established based on the following calculation which recognizes the inherent upstream bottlenecks in the production process which limits the amount of rubber that is sent to the autoclave:

6.647E-5 lb VOC ⁽¹⁾	lbs rubber autoclaved ⁽²⁾	2 Autoclaves
lb rubber autoclaved	year	

⁽¹⁾AP-42 Chapter 4.12 (Draft 11/08) emission factor for curing/autoclaving compound #8.

⁽²⁾Maximum annual production rate supplied by the company in the permit application.

Therefore, provided compliance is demonstrated with the annual production rate, compliance with the annual limitation shall be demonstrated.

c. Emission Limitation:

0.002 pound PM₁₀/hour

Applicable Compliance Method:

The hourly emission limitation was established based on the following calculation:

0.0043 lb PM ₁₀ ⁽¹⁾	lbs dusting agent ⁽²⁾	1.1 ⁽³⁾
1000 lbs	hour	

⁽¹⁾AP-42 Chapter 11.26 (11/95) emission factor for talc screening controlled by a fabric filter.



⁽²⁾Maximum hourly production rate supplied by the company in the permit application.

⁽³⁾Applied 10% safety factor.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

d. Emission Limitation:

0.01 ton PM₁₀/year

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly limitation by the maximum operating schedule of 8,760 hours/year and then dividing by 2,000 pounds/ton. Therefore, provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

There shall be no visible particulate emissions from the Baghouse D1 exhaust.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.