

Facility ID: 0125040959 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Facility ID: 0125040959 Emissions Unit ID: P017 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
bulk batching system I with baghouse (P017)	OAC rule 3745-31-05(A)(3) PTI 01-7480	Particulate emissions shall not exceed 0.51 pound per hour and 2.23 tons/year. See B.1 below.

2. **Additional Terms and Conditions**
 - (a) The 0.51 pound of particulate per hour and 2.23 tons of particulate per year limits were established to reflect the potential to emit for P017. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

1. The permittee shall ensure that the baghouse is in place and operating correctly at an efficiency of 98 percent at all times that emissions unit P017 is in operation.
2. The pressure drop across the baghouse shall be maintained within the range of 2.5 to 4.0 inches of water while P017 is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.
2. The permittee shall collect and maintain monthly records of the total volume, in tons, of all the materials processed.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
0.51 lb particulate matter/hr

Applicable Compliance Method:
Compliance shall be determined according to the following equation:

$$E = TIE \text{ (lbs/hr)} * (1-BCF)$$

Where:

E = particulate matter emissions rate (lbs/hr)
BCF = building control factor (use 95 percent)

TIE = total inside emissions (lbs/hr). The total inside emissions are a sum of the emissions produced during transfer of material from bulk bag to batching bin, from batching bin to container and inside emissions from the baghouse. TIE can be determined from the following equation:

$$TIE = \text{maximum amount of material processed per hour (24 tons/hr)} * \{[\text{emission factor (3 lbs/ton) for transfer of materials from bulk bag to batching bin} * (1-BE)] + \{[\text{emission factor (1.3 lbs/ton) for transfer of materials from batching bin to container} * (1-CE)] + (BHIE \text{ (lbs/hr)})\}$$

Where

BE = Capture control factor during transfer of material from bulk bag to batching bins (use 95 percent)
 CE = Capture control factor during transfer of material from batching bins to container (use 85 percent)
 BHIE = baghouse inside emissions (lbs/hr) which can be obtained from the following equation:

$$BHIE = \{[\text{maximum amount of material processed per hour (24 tons/hr)} * \text{emission factor (3 lbs/ton) for transfer of materials from bulk bag to batching bin} * (BE)] + (\text{maximum amount of material processed per hour (24 tons/hr)} * \text{emission factor (1.3 lbs/ton) for transfer of materials from batching bin to container} * (CE))\} * (1-BCE)$$

Where:

BE = Capture control factor during transfer of material from bulk bag to batching bins (use 95 percent)
 CE = Capture control factor during transfer of material from batching bins to container (use 85 percent)
 BCE = Baghouse control efficiency (use 98 percent)

Emission Limitation:
 2.23 tons particulate matter per year from raw materials processed in P017

Applicable Compliance Method:
 Compliance shall be determined according to the following equation:

$$E = TIE \text{ (lbs/hr)} * 8760 \text{ hrs/yr} (1-BCF) * (1 \text{ ton}/2000 \text{ lbs})$$

Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated by the method specified in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

1. None

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Facility ID: 0125040959 Emissions Unit ID: P018 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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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.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
bulk batching system II with baghouse (P018)	OAC rule 3745-31-05(A)(3) PTI 01-7480	Particulate emissions shall not exceed 0.51 pound per hour and 2.23 tons/year. See B.1 below.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average.
	OAC rule 3745-17-11	The particulate emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

2. **Additional Terms and Conditions**

- (a) The 0.51 pound of particulate per hour and 2.23 tons of particulate per year limits were established to reflect the potential to emit for P018. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limit.

B. **Operational Restrictions**

1. The permittee shall ensure that the baghouse is in place and operating correctly at an efficiency of 98 percent at all times that emissions unit P018 is in operation.
2. The pressure drop across the baghouse shall be maintained within the range of 2.5 to 4.0 inches of water while P018 is in operation.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.
2. The permittee shall collect and maintain monthly records of the total volume, in tons, of all the materials processed.

D. **Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
0.51 lb particulate matter/hr

Applicable Compliance Method:
Compliance shall be determined according to the following equation:

$$E = TIE \text{ (lbs/hr)} * (1-BCF)$$

Where:

E = particulate matter emissions rate (lbs/hr)
BCF = building control factor (use 95 percent)
TIE = total inside emissions (lbs/hr). The total inside emissions are a sum of the emissions produced during transfer of material from bulk bag to batching bin, from batching bin to container and inside emissions from the baghouse. TIE can be determined from the following equation:

$$TIE = \text{maximum amount of material processed per hour (24 tons/hr)} * [\{\text{emission factor (3 lbs/ton) for transfer of materials from bulk bag to batching bin} * (1-BE)\} + \{\text{emission factor (1.3 lbs/ton) for transfer of materials from batching bin to container} * (1-CE)\} + (BHIE \text{ (lbs/hr)})]$$

Where

BE = Capture control factor during transfer of material from bulk bag to batching bins (use 95 percent)
CE = Capture control factor during transfer of material from batching bins to container (use 85 percent)
BHIE = baghouse inside emissions (lbs/hr) which can be obtained from the following equation:

$$BHIE = [\text{maximum amount of material processed per hour (24 tons/hr)} * \text{emission factor (3 lbs/ton) for transfer of materials from bulk bag to batching bin} * (BE)] + [\text{maximum amount of material processed per hour (24 tons/hr)} * \text{emission factor (1.3 lbs/ton) for transfer of materials from batching bin to container} * (CE)] * (1-BCE)$$

Where:

BE = Capture control factor during transfer of material from bulk bag to batching bins (use 95 percent)
CE = Capture control factor during transfer of material from batching bins to container (use 85 percent)
BCE = Baghouse control efficiency (use 98 percent)

Emission Limitation:
2.23 tons particulate matter per year from raw materials processed in P018

Applicable Compliance Method:
Compliance shall be determined according to the following equation:

$$E = TIE \text{ (lbs/hr)} * 8760 \text{ hrs/yr} * (1-BCF) * (1 \text{ ton}/2000 \text{ lbs})$$

Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated by the method specified in OAC rule 3745-17-03(B)(1).

F. **Miscellaneous Requirements**

1. None

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Facility ID: 0125040959 Emissions Unit ID: P019 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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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.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
1500 system with baghouse (P019)	OAC rule 3745-31-05(A)(3) PTI 01-7480	Particulate emissions shall not exceed 0.06 pound per hour and 0.26 ton/year. See B.1 below.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average.
	OAC rule 3745-17-11	The particulate emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

2. Additional Terms and Conditions

- (a) The 0.06 pound of particulate per hour and 0.26 ton of particulate per year limits were established to reflect the potential to emit for P019. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

1. The permittee shall ensure that the baghouse is in place and operating correctly at an efficiency of 98 percent at all times that emissions unit P019 is in operation.
2. The pressure drop across the baghouse shall be maintained within the range of 2.0 to 4.0 inches of water while P019 is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.
2. The permittee shall collect and maintain monthly records of the total volume, in tons, of all the materials processed.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:

0.06 lb particulate matter/hr

Applicable Compliance Method:

Compliance shall be determined according to the following equation:

$$E = TIE \text{ (lbs/hr)} * (1-BCF)$$

Where:

E = particulate matter emissions rate (lbs/hr)

BCF = building control factor (use 95 percent)

TIE = total inside emissions (lbs/hr). The total inside emissions are a sum of the emissions produced during transfer of material from bag dump to mixer, from mixer to bag fill station and inside emissions from the dust

collector. TIE can be determined from the following equation:

$TIE = \text{maximum amount of material processed per hour}(1.38 \text{ tons/hr}) * [\{\text{emission factor (1.25 lbs/ton) for transfer of materials from bag dump to mixer} * (1-BE)\} + \{\text{emission factor (2.5 lbs/ton) for transfer of materials from mixer to bag fill station} * (1-CE)\}] + (BHIE \text{ (lbs/hr)})$

Where:

BE = Capture control factor during transfer of material from bag dump to mixer (use 95 percent)
 CE = Capture control factor during transfer of material from mixer to bag fill station (use 95 percent)
 BHIE = baghouse inside emissions (lbs/hr) which can be obtained from the following equation:

$BHIE = [(\text{maximum amount of material processed per hour (1.38 tons/hr)} * \text{emission factor (1.25 lbs/ton) for transfer of materials from bag dump to mixer} * (BE)) + (\text{maximum amount of material processed per hour (1.38 tons/hr)} * \text{emission factor (2.5 lbs/ton) for transfer of materials from mixer to bag fill station} * (CE))] * (1-BCE)$

Where:

BE = Capture control factor during transfer of material from bag dump to mixer (use 95 percent)
 CE = Capture control factor during transfer of material from mixer to bag fill station (use 95 percent)
 BCE = Baghouse control efficiency (use 98 percent)

Emission Limitation:
 0.26 ton particulate matter per year from raw materials processed in P019

Applicable Compliance Method:

Compliance shall be determined according to the following equation:

$E = TIE \text{ (lbs/hr)} * 8760 \text{ hrs/yr} (1-BCF) * (1 \text{ ton}/2000 \text{ lbs})$

Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated by the method specified in OAC rule 3745-17-03(B)(1).

F. **Miscellaneous Requirements**

1. None