

Facility ID: 0575000185 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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[Go to Part II for Emissions Unit P004](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0575000185 Emissions Unit ID: P003 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> |
|--|--|---|
| (P003) - Carding Line 1 with 3.2mm/BTU gas fired air dryer, clycone and fabric filter. | OAC rule 3745-31-05(A)(3) and PTI 05-14409 | The particulate emissions from this process shall not exceed 0.00015 lb/hr and 0.00066 tons /yr. The organic compound (OC) emissions from this process shall not exceed 0.43 lb/hr and 1.9 tons/yr The emissions from natural gas combustion in this emissions unit shall not exceed the following: 0.3 lb/hr and 1.31 tons/yr nitrogen oxides (NOx); 0.26 lb/hr and 1.14 ton/yr carbon monoxide (CO); 0.006 lb/hr and 0.03 ton/yr filterable particulate emissions (PE); 0.018 lb/hr and 0.08 ton/yr PM10; 0.002 lb/hr and 0.01 ton/yr sulfur dioxide (SO2); and 0.017 lb/hr and 0.07 ton/yr VOC. Compliance with the requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) Visible particulate emissions shall not exceed 10 percent opacity as a 6-minute average from the stack, except as provided by rule. |
| | OAC rule 3745-17-11(B)(1) | The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(A) | The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-07(G)(2) | The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- (a) The PE and OC emission limitations were established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the

production operations and the filter system shall be maintained in accordance within design specification and good engineering practices.

C. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while this emissions unit is in operation. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) was not maintained within the range of 1 to 15 inches of water.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of the terms and conditions shall be determined in accordance with the following methods:

Emission Limitations:
0.00015 lb PE/hr
0.00066 tons PE/yr

Applicable Compliance Method:

The hourly allowable emission limitation was established as follows:

$$\text{HER} = \text{MPE} \times \text{CCE} \times \text{BCE}$$

Where:

HER = Hourly Emission Rate, in lbs/hr;
MPE = Maximum uncontrolled particulate emissions, in lbs/hr (7.5 lbs/hr, Facility's best estimate);
CCE = Cyclone Control Efficiency (98% per manufacturer); and
BCE = Baghouse Control Efficiency (99.9% per manufacturer)

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was determined by multiplying the hourly emission limitation by 8760 hours/year, and then dividing by 2000 lbs/ton).

Emission Limitations:
0.43 lb VOC/hr
1.9 tons VOC/yr

Applicable Compliance Method:

The hourly allowable emission limitation was established as follows:

$$\text{HER} = \text{MPU} \times \text{OCC} \times \text{MHO}$$

Where:

HER = Hourly Emission Rate, in lbs/hr;
MPU = Maximum binder product usage (7,872 lbs/day);
OCC = VOC content of binder (0.132%); and
MHO = Maximum hours of operation (24 hrs/day).

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was determined by multiplying the hourly emission limitation by 8760 hours/year, and then dividing by 2000 lbs/ton).

Emission Limitations:
0.3 lb/hr and 1.31 tons/yr nitrogen oxides (NOx);
0.26 lb/hr and 1.14 ton/yr carbon monoxide (CO);
0.006 lb/hr and 0.03 ton/yr filterable particulate emissions (PE);
0.018 lb/hr and 0.08 ton/yr PM10;
0.002 lb/hr and 0.01 ton/yr sulfur dioxide (SO2); and
0.017 lb/hr and 0.07 ton/yr VOC.

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable emission limitations above by multiplying the maximum hourly natural gas consumption rate by the appropriate emission factor from USEPA's AP-42 and allowable particulate emission rate of OAC rule 3745-17-09(B), for incineration of refuse.

If required, the permittee shall demonstrate compliance with the hourly allowable emission limitations above based on the results of emission testing conducted in accordance with the following Methods:

- i. for NOx, Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A;
- ii. for CO, Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A;
- iii. for PE, Methods 1 - 5 of 40 CFR Part 60, Appendix A;

- iv. for PM10, Methods 201 and 202 of 40 CFR Part 60, Appendix A;
- v. for SO2, Methods 1 - 4 and 6 of 40 CFR Part 60, Appendix A; and
- vi. for VOC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable emission limitations above shall be ensured as long as compliance with the hourly allowable emission limitations is maintained (the annual allowable limitations were determined by multiplying the hourly allowable limitations by 8760, and then dividing by 2000).
 Emission Limitation:
 Visible PE shall not exceed 10% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:
 If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

- 1. None

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Facility ID: 0575000185 Emissions Unit ID: P004 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> |
|--|--|--|
| (P004) - Carding Line 2 with 3.2mm/BTU gas fired air dryer, clycone and fabric filter. | OAC rule 3745-31-05(A)(3) and PTI 05-14409 | The particulate emissions from this process shall not exceed 0.00015 lb /hr and 0.00066 tons /yr. The organic compound (OC) emissions from this process shall not exceed 0.43 lb/hr and 1.9 tons/yr The emissions from natural gas combustion in this emissions unit shall not exceed the following: 0.3 lb/hr and 1.31 tons/yr nitrogen oxides (NOx); 0.26 lb/hr and 1.14 ton/yr carbon monoxide (CO); 0.006 lb/hr and 0.03 ton/yr filterable particulate emissions (PE); 0.018 lb/hr and 0.08 ton/yr PM10; 0.002 lb/hr and 0.01 ton/yr sulfur dioxide (SO2); and 0.017 lb/hr and 0.07 ton/yr VOC. Compliance with the requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) Visible particulate emissions shall not exceed 10 percent opacity as a 6-minute average from the stack, except as provided by rule. |
| | OAC rule 3745-17-11(B)(1) | The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(A) | The emissions limitation specified by this rule is less stringent than the emissions limitation established |

OAC rule 3745-21-07(G)(2)

pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

- (a) The PE and OC emission limitations were established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

B. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.
2. This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the production operations and the filter system shall be maintained in accordance within design specification and good engineering practices.

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

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while this emissions unit is in operation. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) was not maintained within the range of 1 to 15 inches of water.

E. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of the terms and conditions shall be determined in accordance with the following methods:

Emission Limitations:
0.00015 lb PE/hr
0.00066 tons PE/yr

Applicable Compliance Method:

The hourly allowable emission limitation was established as follows:

$$HER = MPE \times CCE \times BCE$$

Where:

HER = Hourly Emission Rate, in lbs/hr;
MPE = Maximum uncontrolled particulate emissions, in lbs/hr (7.5 lbs/hr, Facility's best estimate);
CCE = Cyclone Control Efficiency (98% per manufacturer); and
BCE = Baghouse Control Efficiency (99.9% per manufacturer)

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was determined by multiplying the hourly emission limitation by 8760 hours/year, and then dividing by 2000 lbs/ton).

Emission Limitations:
0.43 lb VOC/hr
1.9 tons VOC/yr

Applicable Compliance Method:

The hourly allowable emission limitation was established as follows:

$$HER = MPU \times OCC \times MHO$$

Where:

HER = Hourly Emission Rate, in lbs/hr;
MPU = Maximum binder product usage (7,872 lbs/day);
OCC = VOC content of binder (0.132%); and
MHO = Maximum hours of operation (24 hrs/day).

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was determined by multiplying the hourly emission limitation by 8760 hours/year, and then dividing by 2000 lbs/ton).

Emission Limitations:
0.3 lb/hr and 1.31 tons/yr nitrogen oxides (NOx);
0.26 lb/hr and 1.14 ton/yr carbon monoxide (CO);
0.006 lb/hr and 0.03 ton/yr filterable particulate emissions (PE);
0.018 lb/hr and 0.08 ton/yr PM10;
0.002 lb/hr and 0.01 ton/yr sulfur dioxide (SO2); and
0.017 lb/hr and 0.07 ton/yr VOC.

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable emission limitations above by multiplying the maximum hourly natural gas consumption rate by the appropriate emission factor from USEPA's AP-42 and allowable particulate emission rate of OAC rule 3745-17-09(B), for incineration of refuse.

If required, the permittee shall demonstrate compliance with the hourly allowable emission limitations above based on the results of emission testing conducted in accordance with the following Methods:

- i. for NO_x, Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A;
- ii. for CO, Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A;
- iii. for PE, Methods 1 - 5 of 40 CFR Part 60, Appendix A;
- iv. for PM₁₀, Methods 201 and 202 of 40 CFR Part 60, Appendix A;
- v. for SO₂, Methods 1 - 4 and 6 of 40 CFR Part 60, Appendix A; and
- vi. for VOC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable emission limitations above shall be ensured as long as compliance with the hourly allowable emission limitations is maintained (the annual allowable limitations were determined by multiplying the hourly allowable limitations by 8760, and then dividing by 2000).

Emission Limitation:

Visible PE shall not exceed 10% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

1. None