

Facility ID: 1431070914 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.

- [Go to Part II for Emissions Unit P001](#)
- [Go to Part II for Emissions Unit P004](#)
- [Go to Part II for Emissions Unit P027](#)
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Facility ID: 1431070914 Emissions Unit ID: P001 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>
P001 - Spray Dryer No. 2	OAC rule 3745-31-02(A)(2) (PTI 14-05539)	Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.19 pound per hour and 0.84 tons per year. Particulate emissions* (PE) from the spray dryer shall not exceed 0.12 pound per hour and 0.53 tons per year. * PE = PM10
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).
	OAC rule 3745-21-07(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

- (a) The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.
Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber and a panel filter with at least a 97% overall control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1590 degrees Fahrenheit.
2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and

maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1590 degrees Fahrenheit.
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate for the cyclonic scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each day:

- a. The scrubber water flow rate, in gallons per minute, once each day.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.
2. The permittee shall submit deviation (excursion) reports that identify all days during which the scrubber flow rate for the cyclonic scrubber were not maintained at the required levels outlined in term B.2.
3. The deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

- a. Emission Limitation:

0.12 lb/hr PE/PM10
0.53 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (200 lb/hr) by the loss factor (0.02) then by the control efficiency of the scrubber and panel filter (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

- b. Emission Limitation:

0.19 lb/hr VOC
0.84 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate (6.14 lbs/hr) by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

2. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since this emissions unit is vented to a common control system and stack that is shared by other emissions units at the facility, the allowable emissions rate during performance tests shall be determined by adding together the hourly emissions rates for all emissions units sharing the common control system and stack.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

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Facility ID: 1431070914 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-Spray Dryer No. 6 - Modified	OAC rule 3745-31-02(A)(2) 14-05539	Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.19 pound per hour and 0.84 ton per year. Particulate emissions* (PE) and particulate matter emissions ten microns and less in diameter (PM10) from the spray dryer shall not exceed 0.12 pound per hour and 0.53 ton per year. * PE = PM10
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).
	OAC rule 3745-21-07(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

- (a) The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.
Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber and a panel filter with at least a 97% overall control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1590 degrees Fahrenheit.
2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1590 degrees Fahrenheit.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate for the cyclonic scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each day:

- a. The scrubber water flow rate, in gallons per minute, once each day.

- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.
2. The permittee shall submit deviation (excursion) reports that identify all days during which the scrubber flow rate for the cyclonic scrubber were not maintained at the required levels outlined in term B.2.
3. The deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

a. Emission Limitation:

0.12 lb/hr PE/PM10
0.53 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (200 lbs/hr) by the loss factor (0.02) then by the control efficiency of the scrubber and panel filter (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

0.19 lb/hr VOC
0.84 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate (6.14 lbs/hr) by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

2. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since this emissions unit is vented to a common control system and stack that is shared by other emissions units at the facility, the allowable emissions rate during performance tests shall be determined by adding together the hourly emissions rates for all emissions units sharing the common control system and stack.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

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Facility ID: 1431070914 Emissions Unit ID: P027 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>
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(P027) - Batch System for Spray Dryer No. 2 OAC rule 3745-31-02(A)(2)
 - Modified 14-05539

Particulate emissions (PE) from the batch system shall not exceed 0.20 pound per hour and 0.88 tons per year.

Particulate matter emissions ten microns and less in diameter (PM10) from the batch system shall not exceed 0.11 pound per hour and 0.50 ton per year.

OAC rule 3745-17-07(A)(1)

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

OAC rule 3745-17-11(B)

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

- (a) The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits. Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

- 1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber water flow rate for the packed bed scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each day:

- a. The scrubber water flow rate, in gallons per minute, once each day.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports that identify all days during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.
- 2. The deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

Emission Limitation:

- 0.20 lb/hr PE
- 0.88 TPY PE/
- 0.11 lb/hr PM10
- 0.50 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (200 lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (11/95) (Approximately 56.8% of PE is PM10).

- 2. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

- 1. Since this emissions unit is vented to a common control system and stack that is shared by other emissions units at the facility, the allowable emissions rate during performance tests shall be determined by adding together the hourly emissions rates for all emissions units sharing the common control system and stack.
- 2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

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Facility ID: 1431070914 Emissions Unit ID: P028 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>
(P028) - Batch System for Spray Dryer No. 6 - Modified	OAC rule 3745-31-02(A)(2) 14-05539	Particulate emissions (PE) from the batch system shall not exceed 0.20 pound per hour and 0.88 tons per year. Particulate matter emissions ten microns and less in diameter (PM10) from the batch system shall not exceed 0.11 pound per hour and 0.50 ton per year.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

- (a) The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.
Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber water flow rate for the packed bed scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each day:

- a. The scrubber water flow rate, in gallons per minute, once each day.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all days during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.
2. The deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

Emission Limitation:

- 0.20 lb/hr PE
- 0.88 TPY PE/
- 0.11 lb/hr PM10

0.50 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (200 lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (11/95) (Approximately 56.8% of PE is PM10).

2. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. **Miscellaneous Requirements**

1. Since this emissions unit is vented to a common control system and stack that is shared by other emissions units at the facility, the allowable emissions rate during performance tests shall be determined by adding together the hourly emissions rates for all emissions units sharing the common control system and stack.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.