

Facility ID: 1318002480 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 N003](#)

[Go to Part II for Emissions Unit N004](#)

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

Facility ID: 1318002480 Emissions Unit ID: N003 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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>
multiple hearth sewage sludge incinerator (See A.2.c.)	a. OAC rule 3745-31-05 See F.2.	a. The particulate emissions shall not exceed 1.30 lbs/ton of dry sludge input.
	b. OAC rule 3745-17-07 See F.2.	b. Visible particulate emissions shall not exceed 20 % opacity, except as provided by rule.
	c. OAC rule 3745-17-09	c. The particulate mass emission limit specified by this rule is less stringent than the mass emission limit specified above.
	d. 40 CFR 61.50, Subpart E See F.2.	d. The mercury emissions shall not exceed 3200 grams per 24-hour period.
	e. OAC rule 3745-35-07	e. See A.2.a and A.2.b.

2. Additional Terms and Conditions

- (a) The emissions of NOx from N003 and N004 shall not exceed 85.1 tons/year.
The emissions of NOx from this emissions unit shall not exceed 10.85 lbs/ton of dry sludge input.
The permittee operates two multiple hearth sewage sludge incinerators that commenced construction in March 1973 and were placed into service in 1983. Particulate emissions from each emissions unit are controlled using venturi/impingement tray scrubbers.

B. Operational Restrictions

1. The permittee is prohibited from incinerating sludge in this emissions unit simultaneously with N004.
2. To ensure that the scrubber is operated according to manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, a pressure drop (as an average over any 1-hour period) of not less than 21 inches of water shall be maintained at all times.
3. The maximum capacity of this emissions unit shall not exceed 1.79 dry tons of sludge per hour.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall record on a monthly basis the amount of sludge incinerated and the time periods of actual incineration for this emissions unit.
2. Within six months following the issuance of this permit, the permittee shall install and thereafter properly operate and maintain equipment necessary to continuously monitor and record the pressure drop across the venturi/impingement tray scrubbers. The permittee shall record the average scrubber pressure drop for each hour during which the emissions unit is in operation.
3. The permittee shall analyze the mercury content of the sludge, in accordance with 40 CFR 61.54, at least once

each calendar year and shall maintain records for each analysis that include the following:

- a. the mercury content of the sludge (on a dry sludge basis, in grams per ton); and
- b. the calculated maximum daily mercury emission rate (in grams) based upon the measured mercury content and a feed rate of 1.79 dry tons of sludge per hour.

D. Reporting Requirements

1. Beginning after the installation of the continuous monitoring and recording equipment, the permittee shall submit deviation (excursion) reports which identify (by date, duration, and measurement values) all violations of the minimum pressure drop requirement.
2. The permittee shall submit a copy of any record that documents a calculated maximum daily mercury emission rate that exceeds 3200 grams. The record shall be submitted within 30 days following the calendar month during which the calculation was performed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time during which sludge is simultaneously burned in emissions units N003 and N004.
4. The permittee shall submit annual reports which specify the total annual NOx emissions from N003 and N004. These reports shall be submitted by March 15 of each year and shall address the preceding calendar year.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
The emission testing shall be conducted within 6 months after the issuance of this permit and within 6 months prior to the expiration of this permit.
The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 1.3 pounds of particulate matter per ton (dry) and 10.85 pounds of NOx per ton (dry).
The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulate: Method 5 of 40.CFR.60, Appendix A

and for NOx: Method 7E of 40.CFR.60, Appendix A.

The test(s) shall be conducted while the emissions unit is operating at no less than 90% of its maximum permitted capacity unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test.

2. Compliance with the visible emission limitation shall be determined in accordance with OAC rule 3745-17-03 (B) (1).
3. Compliance with the mercury emission limitation shall be determined by the sampling, analysis, calculation, and record keeping required in C.3. Emission tests also may be performed in accordance with 40 CFR 61.53 to demonstrate compliance with the limitation.
4. The total, annual NOx emissions are equal to the sum of the emissions from N003 and N004. To determine compliance with the annual emission rate for NOx (in tons) from N003 and N004, the permittee shall multiply the NOx emission factor for each emissions unit (from the last test conducted in accordance with E.1 above) by the actual annual amount of sludge incinerated (in tons per year) in each emissions unit, sum the products from both emissions units, and divide by 2000.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A.1.b, A.1.d, A.1.e, A.2.a, A.2.b, B.1, B.3, C.1, D.3, D.4, E.1 (for NOx only), E.4, and F.1.
2. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 13-193, as issued on February 2, 1976: A.1.a, A.1.b, A.1.d, C.3, and E.1 (for particulates only).

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

Facility ID: 1318002480 Emissions Unit ID: N004 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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>
multiple hearth sewage sludge incinerator (See A.2.c.)	a. OAC rule 3745-31-05 See F.2.	a. The particulate emissions shall not exceed 1.30 lbs/ton of dry sludge input.
	b. OAC rule 3745-17-07 See F.2.	b. Visible particulate emissions shall not exceed 20 % opacity, except as provided by rule.
	c. OAC rule 3745-17-09	c. The particulate mass emission limit specified by this rule is less stringent than the mass emission limit specified above.
	d. 40 CFR 61.50, Subpart E See F.2.	d. The mercury emissions shall not exceed 3200 grams per 24-hour period.
	e. OAC rule 3745-35-07	e. See A.2.a and A.2.b.

2. Additional Terms and Conditions

- (a) The emissions of NOx from N003 and N004 shall not exceed 85.1 tons/year. The emissions of NOx from this emissions unit shall not exceed 10.85 lbs/ton of dry sludge input. The permittee operates two multiple hearth sewage sludge incinerators that commenced construction in March 1973 and were placed into service in 1983. Particulate emissions from each emissions unit are controlled using venturi/impingement tray scrubbers.

B. Operational Restrictions

1. The permittee is prohibited from incinerating sludge in this emissions unit simultaneously with N003.
2. To ensure that the scrubber is operated according to manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, a pressure drop (as an average over any 1-hour period) of not less than 21 inches of water shall be maintained at all times.
3. The maximum capacity of this emissions unit shall not exceed 1.79 dry tons of sludge per hour.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall record on a monthly basis the amount of sludge incinerated and the time periods of actual incineration for this emissions unit.
2. Within six months following the issuance of this permit, the permittee shall install and thereafter properly operate and maintain equipment necessary to continuously monitor and record the pressure drop across the venturi/impingement tray scrubbers. The permittee shall record the average scrubber pressure drop for each hour during which the emissions unit is in operation.
3. The permittee shall analyze the mercury content of the sludge, in accordance with 40 CFR 61.54, at least once each calendar year and shall maintain records for each analysis that include the following:
 - a. the mercury content of the sludge (on a dry sludge basis, in grams per ton); and
 - b. the calculated maximum daily mercury emission rate (in grams) based upon the measured mercury content and a feed rate of 1.79 dry tons of sludge per hour.

D. Reporting Requirements

1. Beginning after the installation of the continuous monitoring and recording equipment, the permittee shall submit deviation (excursion) reports which identify (by date, duration, and measurement values) all violations of the minimum pressure drop requirement.
2. The permittee shall submit a copy of any record that documents a calculated maximum daily mercury emission rate that exceeds 3200 grams. The record shall be submitted within 30 days following the calendar month during which the calculation was performed.

3. The permittee shall submit deviation (excursion) reports which identify all periods of time during which sludge is simultaneously burned in emissions units N003 and N004.
4. The permittee shall submit annual reports which specify the total annual NOx emissions from N003 and N004.. These reports shall be submitted by March 15 of each year and shall address the preceding calendar year.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
The emission testing shall be conducted within 6 months after the issuance of this permit and within 6 months prior to the expiration of this permit.
The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 1.3 pounds of particulate matter per ton (dry) and 10.85 pounds of NOx per ton (dry).
The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulate: Method 5 of 40.CFR.60, Appendix A

and for NOx: Method 7E of 40.CFR.60, Appendix A.

The test(s) shall be conducted while the emissions unit is operating at no less than 90% of its maximum permitted capacity unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test.

2. Compliance with the visible emission limitation shall be determined in accordance with OAC rule 3745-17-03 (B) (1).
3. Compliance with the mercury emission limitation shall be determined by the sampling, analysis, calculation, and record keeping required in C.3. Emission tests also may be performed in accordance with 40 CFR 61.53 to demonstrate compliance with the limitation.
4. The total, annual NOx emissions are equal to the sum of the emissions from N003 and N004. To determine compliance with the annual emission rate for NOx (in tons) from N003 and N004, the permittee shall multiply the NOx emission factor for each emissions unit (from the last test conducted in accordance with E.1 above) by the actual annual amount of sludge incinerated (in tons per year) in each emissions unit, sum the products from both emissions units, and divide by 2000.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A.1.b, A.1.d, A.1.e, A.2.a, A.2.b, B.1, B.3, C.1, D.3, D.4, E.1 (for NOx only), E.4, and F.1.
2. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 13-193, as issued on February 2, 1976: A.1.a, A.1.b, A.1.d, C.3, and E.1 (for particulates only).