

Facility ID: 1318002480 Issuance type: Draft 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: Draft 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>
Multiple hearth sewage sludge incinerator No. 1 (controlled by a venturi scrubber)	40.CFR.61.50 Subpart E OAC Rule 3745-17-07	See No. 2 Additional Terms and Conditions

2. Additional Terms and Conditions

- (a) The permittee shall not discharge or cause the discharge into the atmosphere of:
 - i. Particulate matter at a rate in excess of 1.30 lbs/ton dry sludge input.
 - ii. Any gases which exhibit 20 percent opacity or greater on a 6- minute average basis, except as provided by rule.
Mercury emissions to the atmosphere shall not exceed 3200 grams of mercury per 24-hour period.
The emission of NOx from the facility shall not exceed 99.9 TPY.
The emissions of NOx from this emissions unit shall not exceed 7.23 lbs/ton dry sludge input.

B. Operational Restrictions

1. The permittee is prohibited from incinerating sludge in this incinerator simultaneously with sludge incinerator N004.
2. The permittee shall properly operate and maintain the existing monitoring device for the scrubber pressure drop. 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 or greater than 40 inches of water shall be maintained at all times.
3. The permitted maximum capacity of this emissions unit is 5.25 wet tons of sludge per hour (10,500 wet lbs/hr) or 1.79 dry tons of sludge per hour (3,580 dry lbs/hr).

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 each of the emissions units - N003 and N004.
2. 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 at least once a month and shall maintain monthly records which list the following:
 - i. the mercury content of the sludge (on a wet and dry solids basis in grams per ton), as measured by the use of the manual cold vapor method 245.1, and the calculated daily mercury emission rate based upon a feed rate of 1.79 dry tons of sludge per hour; and
 - ii. the daily sludge processing rate (in tons per day).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify (by date, duration, and measurement values) all violations of the pressure drop range.

2. The permittee shall submit deviation (excursion) reports which identify (by date and measurement values) all exceedances of the mercury limitation.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time during which emissions units N003 and N004 operated simultaneously.
4. The permittee shall submit annual reports which specify the annual NOx emissions for each of the emissions units at the facility. These reports shall be submitted by January 31 of each year and shall address the preceding calendar year.

E. Testing Requirements

1. Applicable Compliance Method - Particulate Matter and NOx

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 every other year commencing in 1997.

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 7.23 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 7 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. The total NOx emissions from the facility are equal to the sum of the emissions from N003, N004 and B001 through B012. To determine compliance with the emission rate for NOx (in tons) from N003 and N004, the permittee shall multiply the NOx emission factor (from the last acceptable test) by the actual annual amount of sludge incinerated (in tons per year), and divide by 2000. To calculate the annual emission rate for NOx (in tons) from B001 through B012, the permittee shall multiply the AP-42 emission factor for NOx (100 lbs/mmcf) by the actual annual amount of natural gas burned (in mmcf), and divide by 2000.

F. Miscellaneous Requirements

1. Sections A through F of this permit are federally enforceable.

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Facility ID: 1318002480 Emissions Unit ID: N004 Issuance type: Draft 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> |
|--|---|--|
| Multiple hearth sewage sludge incinerator No. 2 (controlled by a venturi scrubber) | 40.CFR.61.50 Subpart E
OAC Rule 3745-17-07 | See No. 2 Additional Terms and Conditions |
2. **Additional Terms and Conditions**
- (a) The permittee shall not discharge or cause the discharge into the atmosphere of:
- i. Particulate matter at a rate in excess of 1.30 lbs/ton dry sludge input.
 - ii. Any gases which exhibit 20 percent opacity or greater on a 6- minute average basis, except as provided by rule.
Mercury emissions to the atmosphere shall not exceed 3200 grams of mercury per 24-hour period.
The emission of NOx from the facility shall not exceed 99.9 TPY.
The emissions of NOx from this emissions unit shall not exceed 7.62 lbs/ton dry sludge input.
- B. **Operational Restrictions**
1. The permittee is prohibited from incinerating sludge in this incinerator simultaneously with sludge incinerator N004.
 2. The permittee shall properly operate and maintain the existing monitoring device for the scrubber pressure drop. 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 or greater than 40 inches of water shall be maintained at all times.
 3. The permitted maximum capacity of this emissions unit is 5.25 wet tons of sludge per hour (10,500 wet lbs/hr) or 1.79 dry tons of sludge per hour (3,580 dry lbs/hr).
- 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 each of the emissions units - N003 and N004.
 2. 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 at least once a month and shall maintain monthly records which list the following:
 - i. the mercury content of the sludge (on a wet and dry solids basis in grams per ton), as measured by the use of the manual cold vapor method 245.1, and the calculated daily mercury emission rate based upon a feed rate of 1.79 dry tons of sludge per hour; and
 - ii. the daily sludge processing rate (in tons per day).
- D. **Reporting Requirements**
1. The permittee shall submit deviation (excursion) reports which identify (by date, duration, and measurement values) all violations of the pressure drop range.
 2. The permittee shall submit deviation (excursion) reports which identify (by date and measurement values) all exceedances of the mercury limitation.
 3. The permittee shall submit deviation (excursion) reports which identify all periods of time during which emissions units N003 and N004 operated simultaneously.
 4. The permittee shall submit annual reports which specify the annual NOx emissions for each of the emissions units at the facility. These reports shall be submitted by January 31 of each year and shall address the preceding calendar year.
- E. **Testing Requirements**
1. Applicable Compliance Method - Particulate Matter and NOx

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 every other year commencing in 1998.
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 7.62 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 7 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. The total NO_x emissions from the facility are equal to the sum of the emissions from N003, N004 and B001 through B012. To determine compliance with the emission rate for NO_x (in tons) from N003 and N004, the permittee shall multiply the NO_x emission factor (from the last acceptable test) by the actual annual amount of sludge incinerated (in tons per year), and divide by 2000. To calculate the annual emission rate for NO_x (in tons) from B001 through B012, the permittee shall multiply the AP-42 emission factor for NO_x (100 lbs/mmcf) by the actual annual amount of natural gas burned (in mmcf), and divide by 2000.

F. Miscellaneous Requirements

1. Sections A through F of this permit are federally enforceable.