

Facility ID: 0448002023 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.

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

Facility ID: 0448002023 Emissions Unit ID: N002 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> |
|--|---|--|
| N002 - Animal Crematory, 75 pounds of remains per hour | OAC rule 3745-31-05(A)(3) (PTI 04-1004, issued 2/7/1996) | Total Suspended Particulate (TSP) shall not exceed 0.075 pound per hour and 0.33 ton per year. |
| | | Visible PE from the afterburner stack shall not exceed 10% opacity, as a 6-minute average. |
| | | Nitrogen Oxide (NOx) emissions shall not exceed 0.20 pound per hour and 0.88 ton per year. |
| | | Sulfur Dioxide (SO2) emissions shall not exceed 0.1 pound per hour and 0.44 ton per year. |
| | | Organic Compound (OC) emissions shall not exceed 0.02 pound per hour and 0.09 ton per year. |
| | OAC rule 3745-17-07(A)(1) | See Section A.2.a. |
| | OAC rule 3745-17-09(B) | See Section A.2.b. |
| | OAC rule 3745-17-09(C) | See Section A.2.c. |

2. Additional Terms and Conditions

- (a) The permittee shall operate and maintain the emissions unit covered under this permit in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The animal crematory incinerator, including all associated equipment, stacks and grounds, shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.

B. Operational Restrictions

1. The charge shall not exceed 75 pounds of remains per hour.
2. Ashes shall be removed from the primary chamber on a daily basis.
3. The stack shall be designed to minimize any building down wash impacts from emissions and/or odors on employees and nearby residences. The design shall meet good engineering practices so as not to result in excessive concentrations of air contaminants and/or odors in locations at, near, or in such a configurations, as to affect any air intake for heating and cooling of buildings or at operable windows or doors.
4. All materials shall be incinerated in a controlled air, multi-chamber incinerator, or equivalent technology as approved by the Director, which provides complete combustion of the remains, excluding metallic items, to carbonized or mineralized ash. Any ash that does not meet this criterion shall be re-incinerated.
5. The incinerator shall be operated only by properly trained personnel. A copy of all training records for each operator shall be maintained on file as long as that operator is employed for that job and shall be available to the Toledo Division of Environmental Services upon request.

6. The animal crematory shall be operated and maintained in accordance with the manufacturer's specifications. The secondary combustion chamber shall be designed to have a residence time of not less than 1 second at a minimum of 1,500 degrees Fahrenheit.
 - a. The actual operating temperature of the secondary combustion zone shall be no less than 1,500 degrees Fahrenheit throughout the combustion process in the primary chamber. Cremation in the primary chamber shall not begin unless the secondary chamber combustion zone temperature is equal to or greater than 1,500 degrees Fahrenheit.
 7. The incinerator shall not be operated unless the temperature monitoring devices are operating properly.
 8. The permittee shall not charge the incinerator with "infectious waste" as defined in OAC rule 3745-75-01(B)(27).
 9. The permittee shall only burn Type 4 (animal remains) and associated Type 0 (paper/wood products) waste in this emissions unit. The paper products must be free from all plastics and all other foreign materials, and the wood products must not be preservative-treated wood and also must not contain any foreign materials. No plastic bags or other types of plastic materials shall be burned.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall operate and maintain a continuous temperature monitor and recorder. The monitor shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations to record temperature at the point beyond where 1 second gas residence time is obtained in the secondary chamber combustion zone. Units shall be in degrees Fahrenheit.
 2. The permittee shall record and maintain records of the following information for emissions unit N002:
 - a. operator name;
 - b. the weight of each charge; and
 - c. the time each charge begins.
 3. The permittee shall record each period of downtime for the afterburner and monitoring equipment for each day when the crematory was operated.
 4. The permittee shall perform weekly checks, when emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
 5. The permittee shall have this incinerator inspected quarterly using preventative maintenance procedures recommended by the equipment manufacturer. Each inspection shall include a written report identifying any needed repairs to the unit. If repairs are needed, the incinerator shall not be operated if the operation would result in any exceedance of the emission limits detailed on this permit. These repairs shall be completed within 30 days of the inspection. All inspections and repair reports shall be kept by the permittee for a period of 5 years and shall be made available to the Toledo Division of Environmental Services upon request.
 6. A logbook shall be maintained for the continuous temperature monitoring system installed on this emissions unit. Appropriate records shall include, as a minimum, quality assurance and corrective action activities. The logbook shall be kept on file for a period of 5 years and shall be made available for inspection by the Ohio EPA or its authorized representatives at any time.
- D. Reporting Requirements**
1. If a time period longer than 30 days is needed to complete the repairs as specified in the recordkeeping section of this permit, the Toledo Division of Environmental Services shall be notified in writing. This notice shall list the repairs needed and the reason(s) the repairs could not be accomplished within the required time period.
 2. The permittee shall submit quarterly deviation (excursion) reports, which provide the following information for each period during which the secondary combustion chamber exhaust gas temperatures fall below the applicable limitations:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.
 3. The permittee shall submit quarterly deviation (excursion) reports which provide an identification of all hours of operation during which the charge rate exceeded the incinerator's design capacity, including the actual charge rates for all such hours of operation.
 4. The permittee shall submit quarterly written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions

taken to eliminate the visible particulate emissions. These reports shall be submitted to the Toledo Division of Environmental Services.

5. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

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

TSP shall not exceed 0.075 pound per hour.

Applicable Compliance Method:

This limit is based on the maximum rated capacity of the emissions unit (75 pounds of waste per hour) multiplied by the allowable emission limit of 0.10 pounds of particulate per 100 pounds charged.
Emission Limitation:

TSP shall not exceed 0.33 ton per year.

Applicable Compliance Method:

The annual allowable limitation is based on the hourly allowable emission rate (0.075 pound per hour) multiplied by 8760 hours per year and divided by 2000 pounds per ton. Therefore, compliance with the hourly PE limit constitutes compliance with the annual PE limit.
Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, Appendix A.
Emission Limitation:

NOx emissions shall not exceed 0.20 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum charge rate (75 pounds of waste per hour) by an emission factor of 3.56 pounds of NOx per ton charged from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 2.3, Table 2.3-1, dated 7/93.

If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternate US EPA approved test methods can be used with prior approval from Ohio EPA.
Emission Limitation:

NOx shall not exceed 0.88 ton per year.

Applicable Compliance Method:

The annual allowable limitation is based on the hourly allowable emission rate (0.20 pound per hour) multiplied by 8760 hours per year and divided by 2000 pounds per ton. Therefore, compliance with the hourly NOx limit constitutes compliance with the annual NOx limit.
Emission Limitation:

SO2 emissions shall not exceed 0.10 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum charge rate (75 pounds of waste per hour) by an emission factor of 2.17 pounds of SO2 per ton charged from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 2.3, Table 2.3-1, dated 7/93.

If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternate US EPA approved test methods can be used with prior approval from Ohio EPA.
Emission Limitation:

SO2 shall not exceed 0.44 ton per year.

Applicable Compliance Method:

The annual allowable limitation is based on the hourly allowable emission rate (0.10 pound per hour) multiplied by 8760 hours per year and divided by 2000 pounds per ton. Therefore, compliance with the hourly SO2 limit constitutes compliance with the annual SO2 limit.
Emission Limitation:

OC emissions shall not exceed 0.02 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum charge rate (75 pounds of waste per hour) by an emission factor of 0.299 pounds of OC per ton charged from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 2.3, Table 2.3-2, dated 7/93.

If required, the permittee shall demonstrate compliance using Method 25 of 40 CFR Part 60, Appendix A. Alternate US EPA approved test methods can be used with prior approval from Ohio EPA.

Emission Limitation:

OC shall not exceed 0.09 ton per year.

Applicable Compliance Method:

The annual allowable limitation is based on the hourly allowable emission rate (0.02 pound per hour) multiplied by 8760 hours per year and divided by 2000 pounds per ton. Therefore, compliance with the hourly OC limit constitutes compliance with the annual OC limit.

F. Miscellaneous Requirements

1. None