United States Environmental Protection Agency
Region 10, Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101

Tribal Minor New Source Review Permit
Pursuant to Clean Air Act Title I and 40 CFR 49.151-161

Permit Number: **R10TNSR03100**

Source ID: **[none assigned]**

Issue Date: **07/15/2022**

Effective Date: **07/15/2022**

Permittee: **Heggie's Colonial Funeral Home**

Human Cremation System

This Permittee is authorized to construct/modify in the following location:

228 South Alder Street
Toppenish, Washington 98948
Yakama Nation

Pursuant to the provisions of Clean Air Act (CAA) sections 110(a) and 301(d) and the Code of Federal Regulations (CFR) Title 40, Sections 49.151-161, the U.S. Environmental Protection Agency Region 10 (EPA) is issuing a minor New Source Review (NSR) permit for a minor source of air pollution.

The Permittee is authorized to construct and operate the permitted equipment as described herein, in accordance with the permit application subject to the minor NSR regulations at 40 CFR 49.151-161, and other terms and conditions set forth in this permit. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the CAA and is grounds for enforcement action and for permit termination or revocation. This permit does not release the permittee from any liability for compliance with other applicable federal and tribal environmental laws and regulations, including the CAA.

Pursuant to 40 CFR 49.159(a), this permit will become effective on the date specified above unless review is requested on the permit pursuant to 40 CFR 49.159(d).

GEOFFREY GLASS
Digitally signed by GEOFFREY GLASS
Date: 2022.07.15 11:14:43 -07'00'

Geoffrey Glass, Acting Chief
Air Permits and Toxics Branch
Air and Radiation Division
U.S. EPA, Region 10

July 15, 2022
Date

Table of contents:

Abbreviations, Acronyms and Symbols

CAA	Clean Air Act [42 U.S.C. § 7401, *et seq*.]
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	dry standard cubic foot
EPA	U. S. Environmental Protection Agency, Region 10
EU	Emission Unit
°F	Degrees Fahrenheit
gr	grains
hr	hour
lb	pound
MMBtu	Million British Thermal Units
NAAQS	National Ambient Air Quality Standards
NO_x	Nitrogen Oxides
NSR	New Source Review
O_2	Oxygen
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 micrometers in diameter
PM_{10}	Particulate Matter less than 10 micrometers in diameter
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
TPY	Tons per Year

Part 49 Permit Issuance History

Date of Issuance	Permit Number	Description of Permit Action
07/15/2022	R10TNSR03100	Initial permit issued

Source/Project Description

Existing air pollutant generating activity consists of small animal cremation. The facility's only small animal crematory system was installed in 2018.

The project consists of the installation of a human cremation system (HCS) at the existing funeral home and pet crematory. The HCS is a model A-250-WH "hot hearth" cremation system manufactured by American Crematory Equipment Co. of Santa Fe Springs, California. According to materials provided by the applicant, the HCS can be charged with one case at a time, with a total weight of up to 600 lbs, at a maximum cremation rate of 187-250 lbs/hr.[1] The HCS includes a refractory-lined, natural gas-fired primary combustion chamber and a refractory-lined, natural gas-fired secondary chamber (afterburner). After exiting the afterburner, exhaust gases are emitted through a refractory-lined stack with an inner diameter of 29 inches that extends above the roofline. The stack does not include a rain cap.

Only human remains and containers can be charged to the primary combustion chamber, which is designed to operate at an average temperature of 1650 °F. The afterburner must reach a temperature of at least 1650 °F before combustion air is added to the primary chamber and the primary combustion burner is activated and must remain at a temperature of at least 1600 °F throughout the cremation cycle.

After cremation of a case, ashes will be collected to be returned to the decedent's family.

The above descriptions provided in this section are for informational purposes only.

Table 1: Project Information and Emission Units

Emission Unit (EU) ID	Unit Description	Make/Model	Capacity	Control Technology	Fuel Type
EU 02	Human Cremation System	American Cremation Equipment, Co. A-250-WH	250 lb/hr cremation (i.e., burn) rate 0.75 MMBtu/hr chamber burner	1.5 MMBtu/hr secondary burner	Natural gas

1 "Case" is a term of art used in the cremation industry. It refers to the physical body of a decedent.

Section 1: General Provisions Requirements

1. *Definitions*
   The terms used herein shall have the meaning as defined in 40 CFR 49.152, unless otherwise defined in this permit. If a term is not defined, it shall be interpreted in accordance with normal business use.

2. *Location and Equipment*
   This permit authorizes the Permittee to construct and operate the permitted emission units only in the location listed in the permit. Unless otherwise specified, the terms and conditions of this permit apply to the emission units and control devices/work practices identified in Table 1.

3. *Inspection and Entry*
   Upon presentation of proper credentials, the Permittee must allow the EPA Regional Administrator, and/or an authorized representative, to:
   a. Enter upon the premises where the source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of this permit;
   b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
   d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
   e. Record any inspection by use of written, electronic, magnetic and photographic media.

4. *Severability*
   The provisions of this permit are severable. If any portion of this permit is held to be invalid, the remaining terms and conditions of the permit shall remain valid and in force.

5. *Compliance*
   The Permittee must comply with all conditions of this permit. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the CAA and is grounds for an enforcement action and for the EPA to terminate or revoke the permit. The Permittee shall construct and operate the equipment described in Table 1 in compliance with this permit, the application on which this permit is based, and all other applicable federal and tribal air quality regulations.

6. *Unavailable Defense*
   In an enforcement action it shall not be a defense for the Permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

7. *Property Rights*
   This permit does not convey property rights of any sort, or any exclusive privilege.

8. *Credible Evidence*
   For the purpose of establishing whether the Permittee violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the Permittee had performed the appropriate performance or compliance test procedure.

9. *Liability*
   This permit does not release the Permittee from any liability for compliance with other applicable federal and tribal environmental laws and regulations, including the CAA and its implementing regulations.

10. *National Ambient Air Quality Standards (NAAQS)/Prevention of Significant Deterioration (PSD) Protection*
    The permitted source must not cause or contribute to a NAAQS violation and in an attainment area must not cause or contribute to a PSD increment violation.

11. *Information Requests*
    The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit as specified in Condition 14, or to determine compliance with the permit. For any such information claimed to be confidential, the Permittee must submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.

12. *Permit Becomes Invalid*
    As provided in 40 CFR 49.155(b), unless the EPA grants an extension, this Permit shall become invalid if construction is not commenced (as defined in 40 CFR 49.152(d)) within 18 months after the effective date of this permit, is discontinued for a period of 18 months or more, or is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified.

13. *Proposed Modifications*
    For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emission unit's allowable emissions of a regulated NSR pollutant above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit revision pursuant to 40 CFR 49.154 and 49.155 approving the increase. For a proposed modification that is not otherwise subject to review under major NSR or under the program established under 40 CFR part 49, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).

14. *Revising, Reopening, Revoking and Reissuing, or Terminating for Cause*
    The permit may be revised, reopened, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any condition of this permit.

15. *Cause includes:*
    1. The Permittee is not in compliance with the provisions of this permit;
    2. The EPA determines that the emissions resulting from the operation of the permitted source significantly contribute to National Ambient Air Quality Standard (NAAQS) violations, which are not adequately addressed by the requirements in this permit;
    3. The EPA has reasonable cause to believe that the Permittee obtained approval of the permit by fraud or misrepresentation;
    4. The Permittee failed to disclose a material fact required by the regulations applicable to the permitted source of which the Permittee had or should have had knowledge at the time the Permittee submitted the application;
    5. The permit contains a material mistake or inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
    6. The permit must be revised or revoked to assure compliance with applicable requirements.

16. *Changes in Ownership or Operator*
    In the event of any changes in control or ownership of the Source, this permit shall be binding on all subsequent owners and operators. The Permittee shall notify the succeeding owner or operator of the existence of this permit and its conditions by letter, a copy of which shall be forwarded to the EPA at the address shown in Condition 32. The Permittee shall ensure that the permitted source remains in compliance with the permit until any such transfer of ownership or operator is effective. The Permittee shall ensure the new owner or operator is provided all records required by Section 2.2 prior to the transfer of ownership or operator. The EPA may change the Permittee name and contact information in Section 1 to reflect the new owner or operator in accordance with the administrative amendment provisions in 40 CFR 49.159(f).

Section 2: Source Wide Emission Limitations and Standards

17. *Source Operation*
    At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the equipment that is subject to this permit in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be on information available to the EPA, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

18. *Permittee Shall Comply at All Times*
    The Permittee shall comply with the emission limitations, operating limitations, and other applicable requirements of this permit at all times.

19. *Manufacturer's Emission-Related Instructions*
    All emission units shall be installed, operated, and maintained according to the manufacturer's emission-related written instructions. The Permittee shall change only those emission-related settings that are permitted by the manufacturer.

Section 2.1: Source Wide Monitoring and Testing Requirements

20. *Performance Tests Protocols*
    If performance testing is required, the Permittee shall submit a performance test protocol for all performance tests to the EPA no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol and any changes required by the EPA.

21. *Performance Tests*
    a. The Permittee shall conduct performance tests (as described in 40 CFR 60.8) according to a test protocol as follows:
        i. While the permitted source is operating under representative conditions;
        ii. Using test methods from 40 CFR part 60, appendix A unless alternative methods are approved by the EPA in writing in advance of the test.
        iii. Demonstrating compliance with each limit by averaging the results of at least three test runs of at least one-hour duration each, unless the Permittee can demonstrate to the satisfaction of the EPA that the result of one of the test runs should be discarded. The test results the Permittee submits must contain at least two test runs.
        iv. Simultaneously for CO and NO_X whenever either pollutant is being tested.
    b. For performance test purposes, sampling ports, platforms, and access shall be provided on the emission unit exhaust system in accordance with the requirements of 40 CFR 60.8(e).
    c. The Permittee shall furnish the EPA with a written report of the results of performance tests within 60 days of completion.
    d. In limited circumstances, upon written request and with adequate justification from the Permittee, the EPA may waive a specific performance test and/or allow for testing to be done under different operating conditions. Such justification must demonstrate to the EPA's satisfaction that it would be impractical to conduct the required test at the specified interval or to operate as specified during testing, as applicable. Any waiver or allowance granted by the EPA shall be approved in writing and the Permittee shall adhere to any specifications or requirements concerning such waiver or allowance that the EPA imposes therein.

Section 2.2: Source Wide Recordkeeping Requirements

22. *Record Retention*
    The Permittee shall maintain all records required by this permit for at least 5 years from the date of origin, unless otherwise stated. The Permittee shall maintain the application and all materials supporting the application for the duration of time the affected emission units are covered by this permit. All records shall be maintained onsite or be accessible electronically onsite.

23. *Records of Monitoring and Testing*
    The Permittee shall maintain records of all required monitoring data and support information for any monitoring sample, measurement, report or application, including records of all performance testing. Support information would include, for example, all calibration and maintenance records, and all original strip-chart records or digital records for continuous monitoring instrumentation. Records shall include the following information, as applicable:

a. The location, date and time of sampling, performance test, or measurements;
b. The date(s) analyses were performed;
c. The test plan or monitoring protocol followed;
d. Any documentation required to approve an alternate test method;
e. The company or entity that performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The operating conditions existing at the time of sampling or measurement.

24. *Records of Malfunction, Maintenance, and Repair*
The Permittee shall maintain records of malfunctions, maintenance, and repairs for all emission units and control equipment. The records shall include the following information, as applicable:
a. Identification of the components malfunctioning, inspected, or repaired;
b. The date of the malfunction (including duration), inspection, or repair;
c. For scheduled maintenance, the elapsed time, hours of operation, or other applicable measure since the activity was last performed and when the activity should next be performed;
d. The results of each inspection or repair;
e. Any corrective actions taken as a result of a malfunction or inspection; and
f. The results of any corrective actions taken.

25. *Records of Reports and Notifications*
The Permittee shall maintain records of all reports and notifications required by Section 2.3.

Section 2.3: Source Wide Notification and Reporting Requirements

26. *Notification of Modification and Operations*
The Permittee shall submit a written or electronic notice to the EPA within 30 days after beginning construction, and within 30 days after beginning operation or resuming operation after an authorized modification.

27. *Notification of Change in Ownership or Operator*
If the Source changes ownership or operator, then the new owner or operator must submit a written or electronic notice to the EPA within 90 days after the change in ownership or operator is effective. In the notice, the new owner or operator must provide a written agreement containing a specific date for transfer of ownership or operator, and an effective date on which the new owner or operator assumes partial and/or full coverage and liability under this permit. The submittal must identify the previous owner and operator, and update the name, street address, mailing address, contact information, and any other information about the Source, if such information would change as a result of the change of ownership or operator.

28. *Notification of Closure*
The Permittee must submit a report of any permanent or indefinite closure to the EPA in writing within 90 days after the cessation of all operations at the permitted source. It is not necessary to submit a report of closure for regular, seasonal closures.

29. *Annual Reports*

The Permittee shall submit an annual report on or before March 15 of each year to the EPA. The annual report shall cover the period from January 1 to December 31 of the previous year and shall include:

a. An evaluation of the permitted source's compliance status with the requirements in Section 3;
b. Summaries of the required monitoring, testing, and recordkeeping in Sections 3; and
c. Summaries of deviation reports submitted pursuant to Condition 30.

30. *Deviation Reports*

The Permittee shall promptly report to the EPA any deviations (as the term is defined below) from permit requirements including deviations attributable to upset conditions. Deviation reports shall include:

a. The identity of the affected emission unit where the deviation occurred;
b. The nature of the deviation;
c. The length of time of the deviation;
d. The probable cause of the deviation; and
e. Any corrective actions or preventive measures taken as a result of the deviation to minimize emissions from the deviation and to prevent future deviations.

Deviation means any situation in which an emission unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with the requirements of this permit. For a situation lasting more than 24 hours which constitutes a deviation, each 24-hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:

1. A situation where emissions exceed an emission limitation or standard;
2. A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met; and
3. A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.

Promptly shall mean, for the purposes of reporting deviations:

1. Within 24 hours of discovery when there is a potential of danger to life and health or if complaints were received from the public; or
2. Within 15 days from the end of the month in which the deviation was discovered for all other cases.

31. *Performance Test Reports*

The Permittee shall submit a test report to the reviewing authority within 60 days after the completion of any required performance test. At a minimum, the test report shall include:

a. A description of the affected emission unit and sampling location(s);
b. The time and date of each test;
c. A summary of test results, reported in units consistent with the applicable standard;
d. A description of the test methods and quality assurance procedures used;

e. A summary of any deviations from the proposed test plan and justification for why the deviation(s) was necessary;
f. The amount and type of fuel burned, raw material consumed, and product produced, as applicable, during each test run;
g. Operating parameters of the affected emission units and control equipment during each test run;
h. Sample calculations of equations used to determine test results in the appropriate units; and
i. The name of the company or entity performing the analysis.

32. *Reporting and Notification Address*
The Permittee shall send all required notifications, reports and test plans to the EPA through the EPA's Central Data Exchange/Compliance and Emission Data Reporting Interface (CDX/CEDRI) at https://cdx.epa.gov. (First-time users will need to register with CDX. If no specific reporting option is available in CEDRI, select "Other Reports." If the system is unavailable, contact the EPA, Region 10's Enforcement and Compliance Assurance Division at (206) 553-1200.

33. *Signature Verifying Truth, Accuracy, and Completeness*
All reports and notifications required by this permit shall be signed by a responsible official as to the truth, accuracy and completeness of the information. The report must state that, based on information and belief formed after reasonable inquiry, the statements and information are true, accurate, and complete. If the Permittee discovers that any report or notification submitted to the EPA contains false, inaccurate, or incomplete information, the Permittee shall notify the EPA immediately and correct or amend the submission as soon as practicable.

Responsible official means one of the following:
1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is directly responsible for the overall operation of the permitted source.
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
3. For a public agency: Either a principal executive officer or ranking elected official, such as a chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Section 3: Emission Unit Specific Requirements

Section 3.1: Emission Unit 02 Emission and Operating Limits

34. *Emission Limits*
Emissions from EU 02 shall not exceed the following:

Pollutant	Emission Limit	Reference Method
a. $PM_{10}/PM_{2.5}$	0.04 gr/dscf, 1-hr average, corrected to 7% O_2	$PM_{10}/PM_{2.5}$: EPA Method 201 (filterable) and 202 (condensable)
b. Visible Emissions	0% opacity, 6-min average	EPA Method 9 of Appendix A to 40 CFR part 60

35. *Operating Limits*
The following operating limits apply to EU 02:
a. Only human remains and containers shall be charged into the HCS;
b. Only pipeline quality natural gas shall be used as fuel in the primary and secondary combustion chambers;
c. Before fuel or air is supplied to the primary (chamber) burner, the afterburner shall reach a temperature of at least 1650 °F;
d. Throughout the cremation cycle, the temperature of the afterburner shall be maintained at 1600 °F or greater. There is no averaging time associated with this limit.

36. *Operator Training*
EU 02 may only be operated when an individual trained in crematory operation by the manufacturer (or by an agent approved by the manufacturer) is present. The trained individual may be either the crematory operator or the crematory operator's direct supervisor.

37. *Process Controls and Indicators*
EU 02 shall be equipped with the following controls and indicators and may only operate when they are functioning:
a. An interlock that prevents combustion in both the primary and secondary chambers unless the primary chamber door is closed and locked and prevents the door from being opened until the cooldown cycle is complete;
b. An interlock that prevents combustion in the primary chamber until the temperature in the secondary chamber reaches 1650 °F;
c. An alarm that alerts the operator when the temperature in the secondary chamber falls below 1600 °F; and
d. A system that continuously monitors and records the temperature in the secondary chamber.

Section 3.1.1: Emission Unit 02 Monitoring and Testing Requirements

38. *Monitoring Requirements*
The Permittee shall monitor the following parameters:

	Parameter	Frequency
a.	Hours of operation	Weekly
b.	Natural gas consumption	Monthly
c.	Cycles of operation	Weekly
d.	Number and weight of bodies and containers cremated	Weekly
e.	Temperature of the afterburner during operation	Continuously
f.	Maintenance of HCS	Each occurrence

39. *Operation and Maintenance of Monitoring Equipment*
The Permittee shall prepare, implement, and revise, when necessary, a plan to ensure that all equipment required to comply with the monitoring required by Condition 38 is operated and maintained according to all manufacturer's recommendations to assure that all data collected are valid and representative.

40. *Opacity Monitoring and Testing*
At least once during each calendar month that the HCS operates, the Permittee shall perform a visible emissions survey of EU 02 stack for a continuous period of 15 minutes commencing upon the start of the cremation cycle. The survey shall be performed during daylight hours by an individual trained in EPA's Method 22 while the permitted source is in operation. If visible emissions are detected during the survey, the permittee shall either:
    a. Take corrective action so that within 24 hours of the survey no visible emissions are detected from the HCS for a continuous period of 15 minutes while it is in operation; or
    b. Demonstrate compliance with the opacity limit for a continuous period of 18 minutes for the HCS using EPA's Method 9 by an individual trained and certified in Method 9.

Section 3.1.2: Emission Unit 02 Recordkeeping Requirements

41. *Operator Training Certifications*
    The Permittee shall maintain records demonstrating the HCS training of all trained operators in a manner consistent with the requirements of Section 2.2.