

TECHNICAL FACT SHEET

August 20, 2026

Purpose and Summary

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), is proposing a General Permit to Install (PTI) for a maximum of three crematory unit(s) to be installed at a stationary source without any existing crematory units. A crematory unit is a high-temperature, heat-resistant enclosure designed to safely and efficiently reduce human or animal remains to ash. These units may also be referred to as pathological incinerators. The crematory unit(s) covered by this proposed General PTI will cremate human or animal remains and use propane or natural gas as fuel. The general PTI will provide terms and conditions necessary to ensure that the unit(s) will comply with all applicable state and federal air quality requirements.

The proposed general PTI contains terms and conditions necessary to ensure that the plant will comply with all applicable state and federal air quality requirements, including:

- Site restrictions,
- Emission limits,
- Material usage limits, and
- Annual production limits.

Owners/operators who apply for coverage under the general PTI must certify that the equipment to be installed meets the necessary applicability criteria and will comply with the special conditions of the permit. An owner/operator always has the option of applying for a site-specific PTI, pursuant to R 336.1201 of the Administrative Rules for Air Pollution Control (Rule 201), if their equipment is unable to comply with the conditions of the general PTI.

Restrictions

This general PTI may not be used:

- If the installation is part of a larger project. Improperly permitted installation and/or operations may constitute cause for civil and/or criminal enforcement proceedings and fines as provided for under Act 451, and other applicable state and federal statutes. Use of this general PTI does not obviate the necessity of complying with applicable regulations and obtaining any other necessary permits.
- To circumvent the state and federal Prevention of Significant Deterioration (PSD) regulations as identified in Michigan Air Pollution Control Rule Part 18, Nonattainment New Source Review regulations as identified in Michigan Air Pollution Control Rule Part 19, or in 40 Code of Federal Regulations (CFR) 52.21. Portable HMA plants subject to the PSD regulations as a major modification are not intended to be covered by this general PTI and must obtain a PTI pursuant to Rule 201.

- If there are any outstanding unresolved violations of the Michigan Air Pollution Control rules, orders, permits, or federal air quality regulations.
- If there are other PTIs for the site.

A public comment period and a virtual public hearing, if requested in writing, are being held prior to a decision being made on this general PTI.

Background Information

Part 55 of the Natural Resources and Environmental Protection Act, Act 451 of 1994, allows EGLE to issue a general PTI, covering similar processes or process equipment, after public notice and opportunity for public participation. A general PTI is a permit that provides a streamlined permitting alternative for processes that:

- Produce the same or reasonably similar products.
- Have the same or similar components.
- Emit the same or similar air contaminants.
- Have capture and control methods that are the same or limited to a small number of specific alternatives.
- Are subject to the same emission limitations, monitoring requirements, federal standards, or state rules.

For each proposed general PTI, EGLE holds at least a 30-day public comment period and a virtual public hearing, if requested in writing, prior to making a decision on the proposed general PTI.

Applicable Requirements

The following [state requirements](#) are considered applicable to all sources, processes, or process equipment and are addressed in the General Conditions of the permit.

Table 1: List of State Rules and actions authorized

Citation	Description
R 336.1201a	To issue a general PTI.
R 336.1201(4)	To void a permit.
R 336.1207(1)	To deny a permit.
R 336.1219	Requires written notification of change of ownership.
R 336.1301	Sets the standards for density of particulate emissions.
R 336.1370	Requires the proper disposal of collected air contaminants.

R 336.1901	Prohibits the emission of air contaminants, which interfere with the enjoyment of life and property and/or has injurious effects to health or safety.
R 336.1910	Requires a pollution control device be operated properly.
R 336.1912	Requires notice of abnormal conditions or malfunctions, which result in emissions in excess of the standards.
R 336.2001, 2003, 2004	Allow EGLE to request performance testing and specify how the test should be conducted.

The following state and federal requirements are considered to be applicable to human and animal cremation units and were considered in the development of the proposed general PTI. These requirements are addressed in the Special Conditions of the proposed permit.

Table 2: List of Applicable State Rules

Citation	Description
R 336.1205	Requires enforceable emission limits. This general permit is considered to apply to a true minor source of emissions, therefore this rule does not apply.
R 336.1224	Requires Best Available Control Technology for toxics (T-BACT) and requires that emissions from the process meet the allowed impact levels. In the case of a human or animal crematory unit(s) proposed to be covered by this general PTI, the requirement to have a secondary combustion chamber, including afterburner, operated at 1600°F with a retention time no less than one second is considered T-BACT.
R 336.1225	Prohibits the emissions of a toxic air contaminant (TAC) in excess of a rate that results in a maximum ambient impact which is more than a health-based screening level. Based on AQD experience, the combustion of natural gas or propane in a cremation unit such as this results in minimal emissions of TACs and meets the requirements of this rule. The permittee shall not burn any fuel except natural gas or propane. The EPA 2020 National Emissions Inventory Technical Support Document includes emission factors for certain TACs. However, the AQD has previously determined that nearly 99% of an animal or human body is composed of six elements: oxygen, carbon,

Citation	Description
	hydrogen, nitrogen, calcium, and phosphorus (65.0%, 18.5%, 9.5%, 3.2%, 1.5%, and 1.0%, respectively). Approximately 0.85% is made of potassium, sulfur, sodium, chlorine, and magnesium. The majority of the body will be burned to completion and emitted as water vapor, CO₂, and small quantities of CO. The burn rate and charge rate, along with the burners, limit products of incomplete combustion to a de minimus amount. Based on the composition of an animal or human body, no hazardous products of combustion are expected to form or be emitted.
R 336.1301	Exhaust from each crematory unit shall not exceed 20% opacity as specified in GC 11. When operated properly, the unit(s) should meet this requirement. Operating properly includes following manufacturer guidelines and good safety practices.
R 336.1331	Sets emission standards for particulate matter. Pathological incinerators are listed in Table 31 of Rule 331. Each incinerator has an emission limit of 0.20 lbs/1,000 lbs gas, corrected to 50% excess air, and a requirement to use an afterburner. The AQD calculations for the crematory unit(s) indicate compliance with the emission limit. Each unit will be equipped with a secondary combustion chamber and afterburner. The secondary combustion chamber will have a minimum of one second retention time at a minimum temperature of 1600°F. The unit(s) should remain in compliance with Rule 331 when properly operated and maintained.
R 336.1702	Applies to new sources of volatile organic compounds (VOC). This rule requires an evaluation of the following four items to determine what will result in the lowest maximum allowable emission rate of VOCs: a. BACT or a limit listed by the department on its own initiative b. New Source Performance Standards (NSPS) c. VOC emission rate specified in another permit d. VOC emission rate specified in the Part 6 rules for existing sources. An evaluation of these four items determined that VOC BACT (Rule 702(a)) would dictate the lowest maximum allowable emission rate of VOC from the crematory unit(s) based on the proper operation of the secondary chamber.

Table 3: List of Applicable Federal Regulations

Citation	Description
40 CFR 52.21(c) & (d)	Federal Prevention of Significant Deterioration (PSD) of Air Quality and the National Ambient Air Quality Standards (NAAQS). This regulation requires compliance with ambient air increment concentration limits for clean areas and the NAAQS. The cremation unit(s) exhaust stack restrictions ensure that the impacts of the federally regulated pollutants including particulates, sulfur dioxide, nitrogen dioxide, and carbon monoxide meet the applicable federal air quality standards.

Applicability Criteria

To qualify for a general PTI, maximum of three crematory unit(s) to be installed at a stationary source. Based on the listed applicable requirements, each human and/or animal crematory unit must meet the following criteria:

- Burn either propane or natural gas.
- Burn only pathological wastes - As defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.51c, pathological waste means waste materials consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding.
- Particulate matter (PM) emissions shall not exceed 0.20 pound per 1,000 pounds of gas calculated to 50% excess air on an hourly basis.
- Must be equipped with a secondary combustion chamber with afterburner with a minimum temperature of 1,600°F and a minimum retention time of 1.0 second.
- Have a maximum rated burn rate of 300 pounds per hour based on manufacturer's specifications.
- Discharge exhaust gases for each crematory unit unobstructed vertically upwards to the ambient air from stacks with an exit point at least 3 feet above the building height.
- Have a maximum charge rate of 1,000 pounds.
- For the purpose of verifying the charge weight, maintain a scale onsite for human cremation and a scale either onsite or at a location approved by the AQD District Supervisor for animal cremation.

The applicant must certify through MiEnviro Portal that all of the above criteria are met by completing the General PTI Application form "Equipment-Specific General PTI Primary Form Questions" (See Attachment A).

The general PTI shall not apply to a source, process or process equipment that is included in an existing PTI pursuant to Rule 201 and/or is further referenced in an outstanding consent order or consent judgment.

Permit Conditions

The general PTI terms and conditions propose the applicable emission limits, material usage limits, process/operational limits, testing, monitoring, recordkeeping and reporting requirements, and stack restrictions which are necessary to ensure that the human or animal cremation unit(s) subject to this general PTI will comply with all applicable state and federal air quality requirements.

More information, including the proposed terms, special conditions, and appendices for the general PTI can be found at Michigan.gov/EGLEAirPublicNotice (link).

Pollutant Emissions

The following table provides the estimated emissions for each criteria pollutant for a facility covered by this proposed general permit that has a maximum of three cremation units, each with a maximum burn rate of 300 pounds per hour and meets the requirements above. The emission factors are from EPA 2020 National Emissions Inventory Technical Support Document: Miscellaneous Non-Industrial NEC: Cremation - Human and Animal., which references emission factors from AP-42 Chapter 2 Section 3 for Medical Waste Incineration.

Table 4: Emission Summary

Pollutant	Estimated Emissions (tons per year (tpy))	Significant Emission Rate (SER)
Particulate Matter (PM)	9.2	25
Particulate matter less than 10 microns in diameter (PM10)	7.0	15
Particulate matter less than 2.5 microns in diameter (PM2.5)	6.0	10
Sulfur Dioxide	4.3	40
Carbon Monoxide	5.8	100
Nitrogen Oxides	7.0	40

Pollutant	Estimated Emissions (tons per year (tpy))	Significant Emission Rate (SER)
Volatile Organic Compounds	0.6	40

Ambient Air Impacts

According to AQD Policy and Procedure, “[AQD-022, Dispersion Modeling Guidance for Federally Regulated Pollutants](#)”, if the facility wide emissions are less than the Significant Emission Rate (SER) as defined in the policy, modeling is not required. As shown in Table 4 above, the emissions of each pollutant are less than their respective SER; therefore, modeling is not required.

Owner/Operator Responsibilities

If the owner/operator of a human or animal cremation unit(s) decides to install and operate the unit(s) under the terms of this proposed general PTI, then it is the responsibility of the owner/operator to apply to the AQD, through MiEnviro Portal, for coverage under the general PTI. The owner/operator shall submit the final application forms within MiEnviro Portal. Proposed application questions, which include all information necessary to determine qualification for, and to ensure compliance with, the general PTI are in Attachment A to this Technical Fact Sheet. Installation of equipment prior to the granting of a PTI, including a general PTI, is a violation of Michigan Air Pollution Control Rule 201.

Once the application has been received, by the AQD, permit staff will review the submission package for completeness. The general PTI for human or animal cremation unit(s) will be granted by the AQD to qualifying applicants within 30 days of receipt of a complete submittal package. Upon approval, the AQD will provide a copy of the general PTI and approval letter within MiEnviro Portal to the facility owner/operator.

This public comment period and, if requested, a virtual public hearing on the proposed general PTI will meet the requirements for public participation. Therefore, public comment will not be required for an individual submission package if the general PTI terms and conditions are approved.

Final Action

Prior to making a final decision, the AQD is holding a public comment period, and if requested, a virtual public hearing, on this proposed general PTI for the installation and operation of a maximum of three human or animal cremation unit(s) that use propane or natural gas as fuel. Based on the analyses conducted to date, AQD staff conclude that the proposed project would comply with all applicable state and federal air quality requirements. Also, the project, as proposed, would not violate the federal NAAQS or the state and federal PSD Increments.

Based on these analyses, AQD staff have developed proposed permit terms and conditions to ensure that the general PTI is enforceable and that sufficient monitoring, recordkeeping and reporting would be performed by the applicant to determine compliance with these terms and conditions. If the proposed general permit is deemed approvable, the delegated decision maker may determine a need for additional or revised conditions to address issues raised during the public participation process.

If you would like additional information about this proposal, please contact Lauren Magirl, AQD, at MagirlL@Michigan.gov or 517-582-0386 or Marina Ostaszewski, AQD, at OstaszewskiM1@Michigan.gov or 517-648-7995.

Attachment A
General PTI Application



EQUIPMENT-SPECIFIC GENERAL PTI PRIMARY FORM QUESTIONS NEW

GENERAL PERMIT TO INSTALL FOR CREMATORY UNITS

These questions will be part of the MiEnviro Portable application forms if the general PTI is approved.

Section 1 – Applicant Details

Applicant Name: _____

Applicant Mailing Address: _____

County: _____

Authorized Employee (Name, Title) : _____

Authorized Employee Phone Number: _____

Contact Person (if different than Authorized Employee - for questions regarding this application): _____

Is the proposed equipment identified in the application:

☐ New ☐ Existing

If existing, the applicant is not eligible for this General Permit

Is there an existing Permit To Install for any equipment identified in this application?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Does this source have an existing Renewable Operating Permit?

☐ Yes ☐ No ☐ Not applicable

If yes, the applicant is not eligible for this General Permit

Is any of the proposed equipment included in an outstanding consent order or consent judgement?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Section 2 – Eligibility Questions

The questions in this section are a single select yes or no question.

Does the facility have any existing crematory units on-site?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Are any of the proposed crematory unit(s) already installed at the facility?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Are you proposing to install more than three crematory units under a single General PTI at the site?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

For each proposed crematory unit, will it be propane- or natural gas-fired?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will it burn any waste other than pathological waste as defined under 40 CFR 60.51c?

☐ Yes ☐ No

As defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.51c, pathological waste means waste materials consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding.

If yes, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the burn rate, as specified by the crematory manufacturer, be less than or equal to 300 pounds per hour?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the maximum load (charge), as specified by the crematory manufacturer, be less than or equal to 1,000 pounds?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the secondary combustion chamber have an afterburner?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the retention time of the secondary combustion chamber be greater than or equal to 1.0 second?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the crematory unit have a minimum operating temperature of 1600°F in the secondary combustion chamber, prior to loading a charge?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the operating temperature of the secondary combustion chamber be monitored and recorded on a continuous basis?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each animal pathological waste cremation unit, will there be a scale on-site, or at a location that has been approved by the AQD District Supervisor, to verify the charge weight?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each human pathological waste cremation unit, will there be a scale on-site to verify the charge weight?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the exhaust stack height be at least 3 feet above the building height?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the exhaust stack be discharged unobstructed vertically upward from a stack?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the designed exhaust flow rate be a minimum of 785 standard cubic feet per minute (scfm)?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

Section 3 – Application Equipment Inventory Section

The following section cannot be amended. These questions are requirements of the system and cannot be changed. The questions range from drop-downs, single select, and short text answers. Each proposed crematory unit must be entered into the Application Equipment Inventory. A maximum of three units can be installed under this General PTI.

RELEASE POINT TILE

Name: Create a release point name. There cannot be any spaces in the release point names. Examples: SVCREMATORY1, SVCREMAOTRY2, and SVCREMATORY3.

Type: From the drop-down list, select Vertical.

Description: Enter a brief description of the release point.

Status: From the drop-down list, select Pre-Operating.

Stack Height: Enter the height, in feet above ground.

Stack Shape: Choose circular or rectangular.

Stack Diameter: Enter the diameter of the stack in feet for circular or the length and width of the stack in feet for rectangular. The system will calculate and display the number of inches after the value in feet is entered.

Exit Gas Temp: Enter the temperature of the exhaust gas in degrees Fahrenheit.

Exit Gas Flow Rate: Enter the actual gas flow rate and select the unit for the value entered or enter the velocity. If the flow rate is entered, the velocity will automatically populate.

Exit Gas Velocity: Enter the actual gas velocity and select the unit for the value entered or enter the gas flow rate. If the velocity is entered, the gas flow rate will automatically populate. If you go back and edit any of the above stack information, the system will not recalculate. Exit the screen and start over if you need the system to calculate this field after making edits to the height, diameter, temperature or flow rate.

Location Tab

Latitude (decimal degrees): Enter the release point latitude in decimal degrees.

Longitude (decimal degrees): Enter the release point longitude in decimal degrees.

CONTROL DEVICE TILE

Name: Enter the name of the control device. Example: CDAFTERBURNER1, CDAFTERBURNER2, CDAFTERBURNER3.

Description: Enter a brief description of the control device.

Status: From the drop-down list, select Pre-Operating.

Control Measure: Begin typing afterburner and select afterburner.

CONTROL PATH TILE

Name: The Control Device Pathway name. It must start with CP (or CDP, but CP is preferred).

Description: Enter a brief description of the pathway.

Control Path Segments:

Sequence # - the order of the control devices the exhaust gas goes through between generation and release.

Control Device or Control Path (sub path) – select Device, use the drop-down list to select the correct control device.

EMISSION UNITS TILE

Name: Enter the Emission Unit (EU) ID that is in the permit, EUCREMATORY1, EUCREMATORY2, EUCREMATORY3

Type: Begin to enter the correct code:

- E069 - Cremation-Animal (Pathological Incinerator) or
- E070 - Cremation-Human (Pathological Incinerator)

Description: Enter a brief description that allows the AQD to easily identify the equipment.

Status: From the drop-down list, select Pre-Operating.

Design Capacity: Enter the Total maximum fuel heat input for both the primary and secondary combustion chamber in million British Thermal Units per hour (MMBtu/hr)

Additional Information Tab

Electric Generation: From the drop-down list select no.

Combustion source: From the drop-down list select yes.

UNIT PROCESSES TILE

Emission Unit Identifier: Select an emission unit from the drop-down list.

SCC section: Source Classification Code (SCC), type in:

- 3-15-021-03 - Industrial Processes-Photo Equip/Health Care/Labs/Air Condit/SwimPools-Health Care - Crematoriums-Cremation - Human
- 3-15-021-04 - Industrial Processes-Photo Equip/Health Care/Labs/Air Condit/SwimPools-Health Care - Crematoriums-Cremation - Animal

Description: Enter a description of the process

Status: From the drop-down list, select Pre-Operating.

Release Point Apportionment Tab

Release Point: From the drop-down list select the release point(s) that are used for the activity for the emission unit. There must be a release point for every unit process. If the correct release point isn't in the drop-down list, go to the Release Points tile and add the correct release point.

Control Path: From the drop-down list, select the control path associated with the selected release point if it's controlled.

Apportionment: This should sum to 100% within this tab.

FLEXIBLE GROUPS TILE

Name: Enter the Flexible Group (FG) name listed below, dependent if the application is for animal, human, or a combination.

- Human Units: FGHUMAN
- Animal Units: FGANIMAL

Description: Enter the corresponding description from the following list.

- Human Units: A maximum of three cremation units (pathological incinerator). Each unit must meet all of the following criteria: a secondary combustion chamber with afterburner, uses propane or natural gas as fuel, a maximum charge rate of 1,000 pounds, a maximum burn rate of 300 pounds/hour, and incineration of human waste.
- Animal Units: A maximum of three cremation units (pathological incinerator). Each unit must meet all of the following criteria: a secondary combustion chamber with afterburner, uses propane or natural gas as fuel, a maximum charge rate of 1,000 pounds, a maximum burn rate of 300 pounds/hour, and incineration of animal "pet" remains waste.

Section 4 – Crematory (Pathological Incinerator) Equipment Information

A maximum of three units can be installed under this General PTI and this section must be filled out for each unit.

Emission Unit ID: Select within the drop-down the appropriate Emission Unit name as entered into the site's Application Equipment Inventory form.

Stack/Vent ID: Select in the drop-down the appropriate Stack/Vent ID name as entered into the site's Application Equipment Inventory form.

Manufacturer: _____

Model: _____

Operating Information

Type of waste to be processed in this crematory unit: (Select one)

☐ Human ☐ Animal

Type of Fuel: (Select one)

☐ Propane ☐ Natural gas

Maximum Weight per Charge: _____ pounds

Burn Rate: _____ pounds per hour

Total maximum fuel heat input for both the primary and secondary combustion chamber in million British Thermal Units per hour (MMBtu/hr): _____

Secondary Combustion Chamber Volume (cubic feet): _____

Section 5 – Additional Information

What type of additional Information are you submitting with this application? At a minimum, you must provide manufacturer's information that verifies the heat input for the primary and secondary combustion chamber in million British thermal units per hour (MMBtu/hr) and secondary combustion chamber volume in cubic feet.

☐ Attachment (May include drawings, charts, calculations, assumptions, etc.)

☐ Technical -Specialized information regarding the installation, construction, or use of the process or stack/vent

☐ General - Any supplemental information that is not technical information

Additional information narrative - A brief description of the information. May include calculations, design parameters, etc. (short answer)



EQUIPMENT-SPECIFIC GENERAL PTI PRIMARY FORM QUESTIONS MODIFICATION

GENERAL PERMIT TO INSTALL FOR CREMATORY UNITS

These questions will be part of the MiEnviro Portable application forms if the general PTI is approved.

Section 1 – Applicant Details

Applicant Name: _____

Applicant Mailing Address: _____

County: _____

Authorized Employee (Name, Title) : _____

Authorized Employee Phone Number: _____

Contact Person (if different than Authorized Employee - for questions regarding this application): _____

Is any of the proposed equipment included in an outstanding consent order or consent judgement?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Section 2 – Eligibility Questions

The questions in this section are a single select yes or no question.

Are any of the new proposed crematory unit(s) already installed at the facility?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

Are you proposing to install more than three crematory units under a single General PTI at the site?

☐ Yes ☐ No

If yes, the applicant is not eligible for this General Permit

For each proposed crematory unit, will it be propane- or natural gas-fired?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will it burn any waste other than pathological waste as defined under 40 CFR 60.51c?

☐ Yes ☐ No

As defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.51c, pathological waste means waste materials consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding.

If yes, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the burn rate, as specified by the crematory manufacturer, be less than or equal to 300 pounds per hour?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the maximum load (charge), as specified by the crematory manufacturer, be less than or equal to 1,000 pounds?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the secondary combustion chamber have an afterburner?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the retention time of the secondary combustion chamber be greater than or equal to 1.0 second?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the crematory unit have a minimum operating temperature of 1600°F in the secondary combustion chamber, prior to loading a charge?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the operating temperature of the secondary combustion chamber be monitored and recorded on a continuous basis?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each animal pathological waste cremation unit, will there be a scale on-site, or at a location that has been approved by the AQD District Supervisor, to verify the charge weight?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each human pathological waste cremation unit, will there be a scale on-site to verify the charge weight?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the exhaust stack height be at least 3 feet above the building height?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the exhaust stack be discharged unobstructed vertically upward from a stack?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

For each proposed crematory unit, will the designed exhaust flow rate be a minimum of 785 standard cubic feet per minute (scfm)?

☐ Yes ☐ No

If no, the applicant is not eligible for this General Permit

Section 3 – Application Equipment Inventory Section

The following section cannot be amended. These questions are requirements of the system and cannot be changed. The questions range from drop-downs, single select, and short text answers. Each proposed crematory unit must be entered into the Application Equipment Inventory. A maximum of three units can be installed under this General PTI.

RELEASE POINT TILE

Name: Create a release point name. There cannot be any spaces in the release point names. Examples: SVCREMATORY1, SVCREMAOTRY2, and SVCREMATORY3.

Type: From the drop-down list, select Vertical.

Description: Enter a brief description of the release point.

Status: From the drop-down list, select Pre-Operating.

Stack Height: Enter the height, in feet above ground.

Stack Shape: Choose circular or rectangular.

Stack Diameter: Enter the diameter of the stack in feet for circular or the length and width of the stack in feet for rectangular. The system will calculate and display the number of inches after the value in feet is entered.

Exit Gas Temp: Enter the temperature of the exhaust gas in degrees Fahrenheit.

Exit Gas Flow Rate: Enter the actual gas flow rate and select the unit for the value entered or enter the velocity. If the flow rate is entered, the velocity will automatically populate.

Exit Gas Velocity: Enter the actual gas velocity and select the unit for the value entered or enter the gas flow rate. If the velocity is entered, the gas flow rate will automatically populate. If you go back and edit any of the above stack information, the system will not recalculate. Exit the screen and start over if you need the system to calculate this field after making edits to the height, diameter, temperature or flow rate.

Location Tab

Latitude (decimal degrees): Enter the release point latitude in decimal degrees.

Longitude (decimal degrees): Enter the release point longitude in decimal degrees.

CONTROL DEVICE TILE

Name: Enter the name of the control device. Example: CDAFTERBURNER1, CDAFTERBURNER2, CDAFTERBURNER3.

Description: Enter a brief description of the control device.

Status: From the drop-down list, select Pre-Operating.

Control Measure: Begin typing afterburner and select afterburner.

CONTROL PATH TILE

Name: The Control Device Pathway name. It must start with CP (or CDP, but CP is preferred).

Description: Enter a brief description of the pathway.

Control Path Segments:

Sequence # - the order of the control devices the exhaust gas goes through between generation and release.

Control Device or Control Path (sub path) – select Device, use the drop-down list to select the correct control device.

EMISSION UNITS TILE

Name: Enter the Emission Unit (EU) ID that is in the permit, EUCREMATORY1, EUCREMATORY2, EUCREMATORY3

Type: Begin to enter the correct code:

- E069 - Cremation-Animal (Pathological Incinerator) or
- E070 - Cremation-Human (Pathological Incinerator)

Description: Enter a brief description that allows the AQD to easily identify the equipment.

Status: From the drop-down list, select Pre-Operating.

Design Capacity: Enter the Total maximum fuel heat input for both the primary and secondary combustion chamber in million British Thermal Units per hour (MMBtu/hr)

Additional Information Tab

Electric Generation: From the drop-down list select no.

Combustion source: From the drop-down list select yes.

UNIT PROCESSES TILE

Emission Unit Identifier: Select an emission unit from the drop-down list.

SCC section: Source Classification Code (SCC), type in:

- 3-15-021-03 - Industrial Processes-Photo Equip/Health Care/Labs/Air Condit/SwimPools-Health Care - Crematoriums-Cremation - Human
- 3-15-021-04 - Industrial Processes-Photo Equip/Health Care/Labs/Air Condit/SwimPools-Health Care - Crematoriums-Cremation - Animal

Description: Enter a description of the process

Status: From the drop-down list, select Pre-Operating.

Release Point Apportionment Tab

Release Point: From the drop-down list select the release point(s) that are used for the activity for the emission unit. There must be a release point for every unit process. If the correct release point isn't in the drop-down list, go to the Release Points tile and add the correct release point.

Control Path: From the drop-down list, select the control path associated with the selected release point if it's controlled.

Apportionment: This should sum to 100% within this tab.

FLEXIBLE GROUPS TILE

Name: Enter the Flexible Group (FG) name listed below, dependent if the application is for animal, human, or a combination.

- Human Units: FGHUMAN
- Animal Units: FGANIMAL

Description: Enter the corresponding description from the following list.

- Human Units: A maximum of three cremation units (pathological incinerator). Each unit must meet all of the following criteria: a secondary combustion chamber with afterburner, uses propane or natural gas as fuel, a maximum charge rate of 1,000 pounds, a maximum burn rate of 300 pounds/hour, and incineration of human waste.
- Animal Units: A maximum of three cremation units (pathological incinerator). Each unit must meet all of the following criteria: a secondary combustion chamber with afterburner, uses propane or natural gas as fuel, a maximum charge rate of 1,000 pounds, a maximum burn rate of 300 pounds/hour, and incineration of animal “pet” remains waste.

Section 4 – Crematory (Pathological Incinerator) Equipment Information

A maximum of three units can be installed under this General PTI and this section must be filled out for each unit.

Emission Unit ID: Select within the drop-down the appropriate Emission Unit name as entered into the site's Application Equipment Inventory form.

Stack/Vent ID: Select in the drop-down the appropriate Stack/Vent ID name as entered into the site's Application Equipment Inventory form.

Manufacturer: _____

Model: _____

Operating Information

Type of waste to be processed in this crematory unit: (Select one)

☐ Human ☐ Animal

Type of Fuel: (Select one)

☐ Propane ☐ Natural gas

Maximum Weight per Charge: _____ pounds

Burn Rate: _____ pounds per hour

Total maximum fuel heat input for both the primary and secondary combustion chamber in million British Thermal Units per hour (MMBtu/hr): _____

Secondary Combustion Chamber Volume (cubic feet): _____

Section 5 – Additional Information

What type of additional Information are you submitting with this application? At a minimum, you must provide manufacturer's information that verifies the heat input for the primary and secondary combustion chamber in million British thermal units per hour (MMBtu/hr) and secondary combustion chamber volume in cubic feet.

- ☐ Attachment (May include drawings, charts, calculations, assumptions, etc.)
- ☐ Technical -Specialized information regarding the installation, construction, or use of the process or stack/vent
- ☐ General - Any supplemental information that is not technical information

Additional information narrative - A brief description of the information. May include calculations, design parameters, etc. (short answer)