

ATTACHMENT A

GENERAL CONDITIONS

1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.
2. Operation of any process or process equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. **(R 336.1207(1)(b))**
4. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5).
5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.
6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility's facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.
8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.
9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, through the appropriate MiEnviro Portal schedule and/or form, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install **(R 336.1201(4))**

10. Except as provided in subrules (2) and (3) or unless the special conditions of the general permit to install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301(1))**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this general permit to install.
11. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
12. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**
13. Any required testing protocol shall conform to a format acceptable to the AQD. **(R 336.2003(1))**
14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. **(R 336.2001(4))**
15. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**
16. For a stationary source that becomes a major source, as defined by R 336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R 336.1211(1)(a).
17. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R 336.1215(3) or apply for a modification pursuant to R 336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.

ATTACHMENT A

SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Description / Emission Unit(s) Included in Group
FGHUMAN	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
FGANIMAL	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
FGGENERAL	All crematory units installed under this general PTI.

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

The following conditions apply to FGHUMAN

I. EMISSION LIMITS

Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Underlying Applicable Requirement
1. PM	0.20 lb / 1000 lbs of gas ^a	Hourly	For each unit within FGHUMAN	SC V.1	R 336.1331

^a. Calculated to 50% excess air.

II. MATERIAL LIMITS

- The permittee shall not burn any waste in FGHUMAN other than the following:

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. **Each emission unit shall burn only human pathological waste and associated materials. (40 CFR 60.51c)**

- The permittee shall not charge more than 1,000 pounds per charge in each crematory unit within FGHUMAN, where charge is the total weight of the material placed in the incinerator to be combusted. **(R 336.1301, R 336.1331)**
- The permittee shall not burn any fuel in FGHUMAN other than natural gas or propane. **(R 336.1224, R 336.1225, R 336.1702)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not combust waste in any cremation unit within FGHUMAN unless a minimum temperature of 1600°F and a minimum retention time of 1.0 second in the associated secondary combustion chamber is maintained. **(R 336.1301, R 336.1331, R 336.1910)**
2. Each incinerator shall be installed, maintained, and operated in a manner satisfactory to the AQD District Supervisor to control emissions from FGHUMAN. A list of recommended operating and maintenance procedures is specified in Appendix A. **(R 336.1301, R 336.1331, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any cremation unit within FGHUMAN unless the associated secondary combustion chamber with afterburner is installed, maintained, and operated in a manner satisfactory to the AQD District Supervisor. **(R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a manner satisfactory to the AQD District Supervisor, a device to monitor and record the temperature in the secondary combustion chamber of each cremation unit within FGHUMAN on a continuous basis. **(R 336.1301, R 336.1331)**
3. The permittee shall maintain a scale at the facility for the purpose of verifying the charge weight, where applicable, as required by SC II.2. **(R 336.1301, R 336.1331)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon the request of the AQD District Supervisor, the permittee shall verify PM emission rates from FGHUMAN by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD via MiEnviro Portal. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD via MiEnviro Portal within 60 days following the last date of the test. **(R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record, in a manner satisfactory to the AQD District Supervisor, the temperature in the secondary combustion chamber of each cremation unit within FGHUMAN on a continuous basis. **(R 336.1301, R 336.1331)**
2. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, daily records of the time (duration of burn), description and weight of the charge combusted in each cremation unit within FGHUMAN. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331)**
3. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, records on a calendar quarter basis of the periods of time when only pathological waste is burned in the incinerator, as required by 40 CFR 60.50c(b). The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.50c(b))**
4. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, secondary combustion chamber temperature records for each cremation unit within FGHUMAN, as required by SC IV.2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331)**

5. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, a record of all service, maintenance and equipment inspections for each cremation unit within FGHUMAN. The record shall include the description, reason, date and time of the service, maintenance or inspection. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910)**
6. The permittee shall keep, in a manner satisfactory to the AQD Supervisor, records of the type of fuel burned in each cremation unit within FGHUMAN, pursuant to SC II.3. The permittee shall keep all records on file at a location approved by the AQD District Supervisor for a period of at least five years and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from each crematory unit within FGHUMAN shall be discharged unobstructed vertically upwards to the ambient air from stack(s) with an exit point not less than 3 feet above the building height. **(40 CFR 52.21 (c) & (d))**

IX. OTHER REQUIREMENT(S)

1. The permittee shall not replace or modify any portion of FGHUMAN, including control equipment, nor install additional cremation units unless all of the following conditions are met: **(R 336.1201)**
 - a) The permittee shall update the general permit by submitting the Air General Permit to Install Modification Application – Crematory (Pathological Incinerator) Units via MiEnviro Portal, identifying the existing and new equipment a minimum of 10 days before the replacement, modification or installation of new equipment.
 - b) The permittee shall continue to meet all general Permit to Install applicability criteria after the replacement, modification or installation of new equipment is complete.
 - c) The permittee shall keep records of the date and description of the replacement, modification, or installation of new equipment at the source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.

The following conditions apply to FGANIMAL

I. EMISSION LIMITS

Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Underlying Applicable Requirement
1. PM	0.20 lb / 1000 lbs of gas ^a	Hourly	For each unit within FGANIMAL	SC V.1	R 336.1331

^a. Calculated to 50% excess air.

II. MATERIAL LIMITS

- The permittee shall not burn any waste in FGANIMAL other than the following:

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. **Each emission unit shall burn only animal pathological waste and associated materials. (40 CFR 60.51c)**

- The permittee shall not charge more than 1,000 pounds per charge in each crematory unit within FGANIMAL, where charge is the total weight of the material placed in the incinerator to be combusted. **(R 336.1301, R 336.1331)**
- The permittee shall not burn any fuel in FGANIMAL other than natural gas or propane. **(R 336.1224, R 336.1225, R 336.1702)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not combust waste in any cremation unit within FGANIMAL unless a minimum temperature of 1600°F and a minimum retention time of 1.0 second in the associated secondary combustion chamber is maintained. **(R 336.1301, R 336.1331, R 336.1910)**
- Each incinerator shall be installed, maintained, and operated in a manner satisfactory to the AQD District Supervisor to control emissions from FGANIMAL. A list of recommended operating and maintenance procedures is specified in Appendix A. **(R 336.1301, R 336.1331, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate any cremation unit within FGANIMAL unless the associated secondary combustion chamber with afterburner is installed, maintained, and operated in a manner satisfactory to the AQD District Supervisor. **(R 336.1301, R 336.1331, R 336.1910)**
- The permittee shall install, calibrate, maintain and operate in a manner satisfactory to the AQD District Supervisor, a device to monitor and record the temperature in the secondary combustion chamber of each cremation unit within FGANIMAL on a continuous basis. **(R 336.1301, R 336.1331)**
- The permittee shall maintain a scale at a site approved by the AQD district supervisor for the purpose of verifying the charge weight, where applicable, as required by SC II.2. **(R 336.1301, R 336.1331)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

- Upon the request of the AQD District Supervisor, the permittee shall verify PM emission rates from FGANIMAL by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD via MiEnviro Portal. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD via MiEnviro Portal within 60 days following the last date of the test. **(R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record, in a manner satisfactory to the AQD District Supervisor, the temperature in the secondary combustion chamber of each cremation unit within FGANIMAL on a continuous basis. **(R 336.1301, R 336.1331)**
2. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, daily records of the time (duration of burn), description and weight of the charge combusted in each cremation unit within FGANIMAL. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331)**
3. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, records on a calendar quarter basis of the periods of time when only pathological waste is burned in the incinerator, as required by 40 CFR 60.50c(b). The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.50c(b))**
4. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, secondary combustion chamber temperature records for each cremation unit within FGANIMAL, as required by SC IV.2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331)**
5. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, a record of all service, maintenance and equipment inspections for each cremation unit within FGANIMAL. The record shall include the description, reason, date and time of the service, maintenance or inspection. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910)**
6. The permittee shall keep, in a manner satisfactory to the AQD Supervisor, records of the type of fuel burned in each cremation unit within FGANIMAL, pursuant to SC II.3. The permittee shall keep all records on file at a location approved by the AQD District Supervisor for a period of at least five years and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from each crematory unit within FGANIMAL shall be discharged unobstructed vertically upwards to the ambient air from stack(s) with an exit point not less than 3 feet above the building height. **(40 CFR 52.21 (c) & (d))**

IX. OTHER REQUIREMENT(S)

1. The permittee shall not replace or modify any portion of FGANIMAL, including control equipment, nor install additional cremation units unless all of the following conditions are met: **(R 336.1201)**
 - a) The permittee shall update the general permit by submitting the Air General Permit to Install Modification Application – Crematory (Pathological Incinerator) Units via MiEnviro Portal, identifying the existing and new equipment a minimum of 10 days before the replacement, modification or installation of new equipment.
 - b) The permittee shall continue to meet all general Permit to Install applicability criteria after the replacement, modification or installation of new equipment is complete.

- c) The permittee shall keep records of the date and description of the replacement, modification, or installation of new equipment at the source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.

The following conditions apply to FGGENERAL

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall not install any more than three crematory units under this General Permit to Install. **(40 CFR 52.21 (c) & (d))**

APPENDIX A

Incinerator Operation and Maintenance Guidelines

1. Designate a trained operator for the unit and make that person responsible for compliance with the air pollution control requirements.
2. Clean grates before each day's operation (more often if necessary), and dispose of the ashes properly.
3. Do not combust waste until the secondary combustion chamber (afterburner) is at or above the minimum required temperature. This temperature must be maintained for the duration of the burn cycle.
4. Do not overload the incinerator. Stay within the given loading rates and follow the manufacturer's instructions.
5. Schedule charges to minimize opening the charging door as infrequently as possible. Opening the charging door lets cold air in and quenches the fire causing smoke.
6. Burn only the type of wastes that the incinerator has been approved to burn. Follow the manufacturer's instructions to maximize the efficiency of the unit, and to properly burn the waste(s).
7. Keep the combustion air adjusted according to the manufacturer's instructions.
8. Observe the stack frequently and adjust the operation as necessary to eliminate smoke and flyash.
9. Post a copy of the manufacturer's manual and these guidelines near your incinerator.
10. Make quarterly inspections to check and service all of the equipment. If a qualified person is not available for proper inspections, a service contract with a reputable manufacturer is advisable.
11. Follow manufacturer's operation and maintenance guidelines.