

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

February 22, 2023

PERMIT TO INSTALL
118-08A

ISSUED TO
Capital Region Airport Authority

LOCATED AT
3170 West State Road
Lansing, Michigan 48906

IN THE COUNTY OF
Ingham

STATE REGISTRATION NUMBER
N8035

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: January 30, 2023	
DATE PERMIT TO INSTALL APPROVED: February 22, 2023	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. 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, P.O. Box 30260, Lansing, Michigan 48909-7760, 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))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this 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)**
7. 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 condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - 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 Permit to Install.
12. 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 Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
EUINCINERATOR	Model 200-CA Destructor Waste Incinerator Natural Gas Fired with a 2.3 MMBtu/hr capacity. (Primary burner: 0.8 MMBtu/hr. Secondary burner (also called an Afterburner): 1.5 MMBtu/hr.)	NA

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 336.1291.

**EUINCINERATOR
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Model 200-CA Destructor Waste Incinerator
 Natural Gas Fired with a 2.3 MMBtu/hr capacity.
 (Primary burner: 0.8 MMBtu/hr. Secondary burner (also called an Afterburner): 1.5 MMBtu/hr.)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Secondary combustion chamber with afterburner.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.10 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air.	Hourly	EUINCINERATOR	SC V.1	R 336.1331(1)(c)

2. Visible emissions from EUINCINERATOR shall not exceed a six-minute average of 20 percent opacity.
(R 336.1301(1)(c))

II. MATERIAL LIMIT(S)

1. The permittee shall not burn any waste in EUINCINERATOR other than the Animal and Plant Health Inspection Service (APHIS) regulated garbage removed from international passenger and freight aircraft arrivals as follows. **(R 336.1225, R 336.1901, 40 CFR 60.2887(p))**

a) **Contraband or Prohibited Goods**—As excluded from the federal Standards of Performance for New Stationary Sources, 40 CFR Part 60 Subpart EEEE, contraband or prohibited goods mean wastes such as agricultural food products that cannot be transported into the country or across State lines to prevent biocontamination. The exclusion does not apply to items either confiscated or incinerated by private, industrial, or commercial entities.

2. The permittee shall not burn any waste in EUINCINERATOR from other airports. The permittee shall only burn APHIS regulated garbage, as specified in SC II.1, coming from aircraft arriving at this facility.
(40 CFR 60.2887(p))

3. The permittee shall not place more than 40 pounds of total material in EUINCINERATOR per 1 hour timeframe.
(R 336.1224, R 336.1225, R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))

4. The permittee shall not burn any fuel in EUINCINERATOR other than natural gas. **(R 336.1224, R 336.1225, R 336.1702)**

5. The permittee shall not burn any hazardous materials in EUINCINERATOR, as defined in 40 CFR Part 63 Subpart EEE. **(R 336.1225, 40 CFR Part 63, Subpart EEE)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUINCINERATOR for more than 624 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**
2. The permittee shall not combust waste in EUINCINERATOR unless a minimum temperature of 1600°F and a minimum retention time of 0.5 seconds in the secondary combustion chamber are maintained. **(R 336.1224, R 336.1331, R 336.1702)**
3. The incinerator shall be installed, maintained, and operated in a satisfactory manner to control emissions from EUINCINERATOR. A list of recommended operating and maintenance procedures is specified in Appendix B. **(R 336.1224, R 336.1331, R 336.1702)**
4. The permittee shall not operate EUINCINERATOR unless the procedures outlined in the waste management plan attached as Appendix B are implemented and maintained. **(R 336.1224, R 336.1331, R 336.1702)**
5. The permittee shall not operate EUINCINERATOR unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 90 days of permit issuance and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUINCINERATOR unless the afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each air-cleaning device in accordance with an approved MAP for EUINCINERATOR as required in SC III.5. **(R 336.1224, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature in the secondary combustion chamber of EUINCINERATOR on a continuous basis. **(R 336.1224, R 336.1301, R 336.1331, R 336.1702)**

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 and visible emissions from EUINCINERATOR 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
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

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 Technical Programs Unit and District Office. 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 Technical Programs Unit and District Office 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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1301, R 336.1331)**
2. The permittee shall keep, in a satisfactory manner, daily records of the time, description and weight of waste placed in EUINCINERATOR, as required by SC II.1, SC II.2 and SC II.3. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1331, R 336.1702)**
3. The permittee shall keep, in a satisfactory manner acceptable to the AQD District Supervisor, a log of the annual hours of operation on a 12-month rolling basis for EUINCINERATOR per SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**
4. The permittee shall keep, in a satisfactory manner, secondary combustion chamber temperature records for EUINCINERATOR, as required by SC III.2 and SC IV.1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1301, R 336.1331, R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVINCINERATOR	15	26.5	R 336.1225 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX A Incinerator Operation and Maintenance Guidelines

1. Designate a trained operator for your unit and make that person responsible for compliance with the air pollution control requirements.
2. Grates should be cleaned before each day's operation (more often if necessary), and the ashes disposed of properly.
3. Preheat the unit with the burners (not with waste) for at least 15 minutes.
4. Do not overload the incinerator. Stay within the given loading rates, and follow the manufacturer's instructions.
5. Schedule charges to minimize the frequency of opening the charging door. 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 your operation as necessary to eliminate smoke and fly ash.
9. A copy of the manufacturer's manual and this Guideline should be posted near the incinerator.
10. Make quarterly inspections to check and service all of the equipment. If a qualified person is not available on-site for proper inspections, a service contract with a reputable manufacturer is advisable.

APPENDIX B Waste Management Plan

This Waste Management Plan (WMP) has been developed for an incinerator installation located on Capital City Airport at Lansing, Michigan. The purpose of the plan is to ensure consistent and proper handling of the disposal of international waste materials at this facility. In order to keep the plan current, management personnel will review the plan on an annual basis and update as necessary.

1. Containers.

The facility will use distinctive plastic bags and sealable containers for the collection and transportation of regulated garbage wastes as approved by United States Customs and Border Protection (USCBP) and United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ).

2. Storage of regulated garbage.

- All areas where waste is collected, stored, or handled will be restricted to deny access by unauthorized persons.
- Have on file and implement a pest control program.
- Waste will be stored to minimize exposure to natural elements.
- The containers used for storage are to be labeled and locked to prevent unauthorized access.
- Warning signs will be posted to prevent unauthorized access.
- Storage and handling of regulated garbage will be as authorized and approved in the Compliance Agreements.

3. Process/Control Device.

The collection of charge materials and disposal of ash and/or other air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air.

4. Spill containment and clean up.

When a waste spill or leak is detected anywhere on the facility property, the following actions will be taken per the Compliance Agreement but not limited to these actions:

- An absorbent material shall be used to contain liquids.
- A mechanical method (broom, shovel) shall be used to remove solids.
- The spill area is to be disinfected and cleaned immediately with approved disinfects.
- The spilled material shall be disposed of properly at the treatment facility.

5. Recordkeeping.

In order to facilitate monitoring of its waste management plan, the facility shall maintain on its premises all records as required by the Compliance Agreement including but not limited to:

- The name and address of each customer.
- A description of any spill incidents and corrective actions taken.
- A description of any incidents where unacceptable waste materials were shipped to or handled at the facility and the corrective actions taken.
- The date of the annual WMP review and reference to any changes made to the plan.

6. Prohibited Wastes.

The facility shall not accept or charge in the incinerator any medical or infectious wastes, including sharps.

The facility shall not accept or charge in the incinerator any mercury-containing wastes. Examples include, but are not limited to, mercury-containing thermometers, manometers, esophageal devices or other wastes containing elemental mercury, laboratory chemicals and/or fixatives that contain mercury compounds.