

Township of New Milford
Susquehanna County, Commonwealth of Pennsylvania

Ordinance No. _____

AN ORDINANCE OF THE TOWNSHIP OF NEW MILFORD, SUSQUEHANNA COUNTY, PENNSYLVANIA REGULATING WASTE INCINERATORS WITHIN THE TOWNSHIP; SETTING AIR EMISSION LIMITS; IMPOSING HUMAN HEALTH RISK ASSESSMENT REQUIREMENTS; AND REQUIRING CONTINUOUS EMISSIONS MONITORING UNDER WHICH WASTE INCINERATION MAY BE PERMITTED.

BE IT ORDAINED and enacted by the Township Supervisors and it is hereby ordained and enacted by the authority of the same as follows:

Section 1. Purpose

The purpose and intent of this ordinance is to provide environmental protection to the citizens of the Township for air pollution emissions associated with Waste Incinerators. The ordinance imposes air emissions limits, a human health risk assessment requirement, and continuous emissions monitoring requirements for Waste Incinerators to ensure that public health is protected to the greatest degree possible and to exercise the authority granted to the Township under the Pennsylvania Air Pollution Control Act.

Section 2. Applicability

This ordinance shall apply and be in full force and effect to Waste Incinerators located in Township of New Milford, Susquehanna County, Pennsylvania constructed after the effective date of this ordinance.

Waste Incinerators are defined in the "Definitions" section of this ordinance and do not include "outside burning" activities associated with residential, commercial, or agricultural activities and do not include waste oil burners which meet the used oil management and air pollution requirements of the Pennsylvania Department of Environmental Protection ("PA DEP").

Section 3. Definitions

Best Available Control Technology – An emissions limitation or equipment design requirement based on the maximum degree of reduction of each air pollutant subject to regulation under the Clean Air Act emitted from or which results from waste incinerator operations. The maximum degree of reduction for each pollutant shall be determined based on the technical feasibility and most stringent emission limitation which is achieved in practice.

Person – Any individual, public or private corporation for profit or not for profit, association, partnership, firm, trust, estate, department, board, bureau or agency of the Commonwealth or the Federal Government, political subdivision, municipality, district, authority or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

Waste Incinerator – means any device, apparatus, equipment or structure designed to burn, oxidize, or pyrolyze solid, semisolid, liquid or gaseous wastes for the primary purposes of volume reduction or of disposal. Excluded from this definition are the following: crematories used to dispose of human or animal remains; open burning of waste materials outdoors or in burn barrels or fireplaces; heating systems using biomass-fired stoves, boilers, or outdoor hydronic heating systems; waste incinerators installed or used in one or two-family dwellings or in multi-occupied dwellings containing six or less family units one of which is owner occupied; air pollution control devices such as flares or oxidizers; oil/gas extraction, processing, and transfer systems including gas dehydrators and compressor station engines; cement or lime kilns; waste oil burners which meet the used oil management requirements of the PA DEP; and, minor sources exempted from air quality Plan Approval requirements by PA DEP.

Waste - includes discarded materials classified as municipal, residual, hazardous, infectious, or chemotherapeutic wastes. Excluded from this definition are fossil fuels including natural gas, propane, fuel oil, coal and biomass materials.

Section 4. Air Emission Limits

- (a) Waste Incinerators must meet the air emission limits for each air pollutant identified in Table 1 of this ordinance. These emission limits apply at any Waste Incinerator exhaust stack(s) that exhaust air pollutants to the atmosphere.
- (b) It shall be unlawful for Waste Incinerators to emit more than the limits identified in Table 1. Notwithstanding these limits, Waste Incinerators must also meet “risk based” emissions limits as specified in the “Risk Assessment” section of this ordinance.
- (c) The emission limits apply at all times to Waste Incinerators including periods of incinerator startup, shutdown, or malfunction.
- (d) Compliance with the Table 1 and risk based emission limits by Waste Incinerators shall be demonstrated through continuous emissions monitoring (CEM) and routine emissions testing as specified in the “Emissions Testing and Monitoring” section of this ordinance.
- (e) Waste Incinerators shall not result in odors being detectable by sense of smell at any location beyond the property line of the incinerator location.
- (f) Waste Incinerators shall not result in the emission of particles of unburned waste or ash which are visible in the atmosphere or at any location beyond the property line of the incinerator location.

Section 5. Ambient Air Quality Monitoring

- (a) Any owner and operator of a Waste Incinerator must conduct pre-construction and post-construction ambient air quality monitoring to measure baseline background air pollution levels at the Waste Incinerator location and to demonstrate that post-construction Waste Incinerator air quality impacts do not exceed the predicted maximum impacts required in the Risk Assessment section of this ordinance.

- (b) Ambient air quality monitors must be installed, calibrated and operated at Waste Incinerators in accordance with the U.S. EPA criteria set forth in 40 CFR 58, Appendix E. Ambient monitoring shall be conducted for a period of at least twelve (12) months prior to commencing construction and for a period of at least five (5) years following initial operation of the incinerator. Pre-construction monitoring shall be conducted at a location that is representative of background ambient air at the proposed Waste Incinerator location (e.g., near the property line where public have unrestricted access). Post-construction monitoring shall be conducted at a minimum of two locations: (1) an "upwind" location that is located near the Waste Incinerator property line at a location determined based on prevailing winds as determined by the pre-construction meteorological monitoring data required in the "Risk Assessment" section of this ordinance; and, (2) a "downwind" location that is as close as practicable to the location where air dispersion modeling predicts maximum pollutant concentrations.
- (c) Continuous ambient monitoring at the Waste Incinerator shall be conducted for the following air pollutants: particulate matter less than 10 microns in diameter (PM10), PM2.5, NO2, SO2, and CO. Lead, PM10-metals, and organic compound ambient monitoring shall be conducted using 24-hour filter-based and summa canister samplers operating on a 1-in-3 day schedule. The PM10 filter samples shall undergo gravimetric analysis and determination of toxic metals (arsenic, beryllium, cadmium, chromium, manganese and nickel) in accordance with U.S. EPA Method IO-3.5. The canister samples shall undergo GC-MS analysis for organic compounds in accordance with U.S. EPA Method TO-15.
- (d) In the event that the post-construction monitoring data demonstrates that ambient concentrations at the downwind location exceeds any pollutant concentration listed as a National Ambient Air Quality Standard (NAAQS) specified in 40 CFR 51, the Waste Incinerator shall immediately cease operations and initiate an investigation and implement corrective actions prior to start up. The Waste Incinerator shall not start up until ambient air quality levels at both upwind and downwind locations are below the NAAQS concentrations.
- (e) In the event that the Waste Incinerator ambient air quality impacts exceed either a PSD Increment concentration (as identified in 40 CFR 52.21) or a maximum air toxic concentration predicted as part of the risk assessment air dispersion modeling analysis, the Waste Incinerator shall immediately cease operations and initiate an investigation and implement corrective actions prior to start up. The "incinerator air quality impacts" shall be calculated as the difference between the downwind and upwind monitors over the averaging period corresponding to the NAAQS averaging period (e.g., 24 hours for PM10/PM2.5, 1-hour for SO2/NO2) or a 24-hour period for metals and organics.
- (f) The owner and operator of a Waste Incinerator shall maintain a system that will allow citizens of the Township to, at any time, access the ambient air monitoring data via a publicly accessible website. The continuous monitoring data shall be provided on a real-time basis. The lead, metals, and organic compound data will be posted on the website within five (5) days of receipt of the laboratory analysis, but in no case later than thirty (30) days following collection of the samples.

Section 6. Risk Assessment

- (a) The owner and operator of a Waste Incinerator must conduct a comprehensive human health multi-pathway risk assessment to demonstrate that human health risks associated with proposed

air emission rates from the Waste Incinerator facility are acceptable prior to commencing construction of the incinerator facility. The risk assessment must follow the methodology outlined in the most recent version of the U.S. EPA document "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities" (EPA 530-R-05-006, September 2006). Both cancer and non-cancer risks must be calculated for all air toxic pollutants including, at a minimum, any air pollutants classified as "hazardous air pollutants" under section 112 of the Clean Air Act.

- (b) The risk assessment must include an air dispersion modeling assessment to evaluate inhalation cancer and non-cancer risks associated with all air toxic pollutants. Both stack and fugitive emission rates shall be included in the modeling analysis. The air dispersion modeling analysis must be conducted in accordance with the U.S. EPA modeling guidelines identified in 40 CFR 51, Appendix W. An air dispersion modeling protocol must be submitted to and approved by the New Milford Township Board of Supervisors and the approved modeling protocol must be used to evaluate inhalation risks both at offsite and at onsite locations at the Waste Incinerator facility.
- (c) The owner and operator of a Waste Incinerator must install and operate a meteorological monitoring station to collect representative meteorological data at the proposed location for a minimum of twelve (12) months for use in the air dispersion modeling analysis. The meteorological monitoring station must be sited and operated in accordance with U.S. EPA criteria in the "Quality Assurance handbook for Air Pollution Measurement Systems Volume IV: Meteorological Measurements Version 2.0 (Final)".
- (d) The inhalation risk assessment must evaluate risks using the latest and most stringent chemical-specific toxicity information published by the U.S. EPA on the Integrated Risk Information System (IRIS), the Agency for Toxic Substances and Disease Registry (ATSDR) minimum risk levels (MRLs), and by the California Office of Environmental Health Hazard Assessment (OEHHA). The most stringent unit risk factors (URFs) for carcinogens, reference concentrations (RfCs) for non-carcinogens, MRLs (ATSDR), and reference exposure levels (CA OEHHA) must be used to calculate risks.
- (e) The cumulative total cancer risks associated with all air toxic emissions from the Waste Incinerator shall be less than 1 in 1 million for the most exposed individual for an entire 70-year lifetime.
- (f) The total non-cancer risk, expressed as a Hazard Quotient, shall not exceed 0.5 for the most exposed individual based on the maximum 24-hour modeled concentration at any location.
- (g) The air toxic emission rates for each of the Waste Incinerator facility emission points (stack and fugitive sources) used in the risk assessment shall be established as emission limits if: (a) the air toxic is not listed on Table 1; or, (b) the air toxic emission rate is lower than the equivalent emission rates identified in Table 1.

Section 7. Emissions Testing and Monitoring

- (a) The owner and operator of a Waste Incinerator shall conduct an initial performance test to demonstrate compliance with all air emission limits identified in Table 1 and the risk-based emission limits established as part of the Risk Assessment requirements in Section 6. The testing must follow U.S. EPA emissions testing procedures and U.S. EPA Reference Test Methods. Subsequent testing must be conducted at least once annually (within twelve (12) months following the previous test program).

- (b) The testing program in Section 7(a) shall include a demonstration in accordance with U.S. EPA Method 204 that the waste storage, handling, incinerator feed, and ash handling systems are located in a permanent total enclosure and that all exhausts from these areas are directed to the incinerator combustion chamber. Continuous pressure gauge readings at each of the waste and ash handling areas shall be monitored during the test.
- (c) Testing must be conducted while the Waste Incinerator waste feed is at a maximum rate and the waste composition is at the maximum concentration rate of each toxic that will be processed.
- (d) The Waste Incinerator waste feed rates and waste toxic composition rates shall not exceed the rates measured during the previous test program demonstrating compliance with all air emission limits.
- (e) The Waste Incinerator and air pollution control system operating parameters, including the waste and ash handling area pressure readings, must be monitored through the course of the test program and the average rates measured during the test shall become operating parameter limits (OPLs). These operating parameters shall include, as a minimum, combustion temperature, building pressure readings, scrubber flowrates and pressure drops, filter pressure drops, electrostatic precipitator amperage rates, and carbon injection rates.
- (f) The owner and operator of a Waste Incinerator shall install, calibrate, operate, and maintain CEM equipment to continuously monitor and record pollutant emissions. The CEM equipment shall, at a minimum, measure visible emissions (opacity), sulfur dioxide, nitrogen oxides, carbon monoxide, total hydrocarbons, hydrogen chloride, particulate matter, mercury, and stack exhaust flowrate and oxygen content. The monitoring shall be conducted in accordance with the U.S. EPA Performance Specifications set forth in 40 CFR 60, Appendix B. In the event that the U.S. EPA promulgates additional Performance Specifications for any of the other pollutants subject to emission limits, the owner and operator shall install, calibrate, and operate CEM equipment for those pollutants within twelve (12) months of promulgation.

Section 8. Operational Restrictions

- (a) All Waste Incinerators shall be designed with air pollution control equipment that meet Best Available Control Technology requirements and that include, at a minimum, a secondary combustion chamber capable of achieving a minimum combustion temperature of 1,800 °F for a minimum residence time of 2.0 seconds, an electrostatic precipitator or high-efficiency filtration system, and a multi-stage scrubbing system with carbon injection system.
- (b) Combustor design for the Waste Incinerator shall include elements to prevent any fugitive air emissions by maintaining the combustion zone pressure lower than ambient pressure and by operating any waste handling and incinerator feed and outlet areas under negative pressure and directing exhausts from these areas to the incinerator.
- (c) The Waste Incinerator shall include a functioning automatic waste cutoff system that immediately and automatically cuts off the waste feed to the incinerator and which shall be activated and operated in the following events:
 - 1. when any deviations from Operating Parameter Limits (OPLs) are monitored including any time the minimum combustion chamber temperature is not met;

2. when any emission limit monitored by CEM is exceeded;
 3. the pressure in the combustion zone is greater than ambient pressure for more than 10 seconds;
 4. upon malfunction of any CEM equipment or upon malfunction of any monitoring equipment measuring compliance with an OPL.
- (d) Waste material shall not be fed to the Waste Incinerator until compliance with all OPLs is achieved including achieving the minimum combustion chamber temperature. Start up of the incinerator shall begin with the heating of the combustion zone with natural gas, distillate fuel oil, or another fuel that is approved by the PA DEP as non-hazardous.
- (e) Daily records of waste materials received for incineration at the Waste Incinerator must be maintained and the records shall contain, at a minimum, the following information:
1. Name and address of the facility from which the material was received;
 2. Name and address of the facility from which the material was generated or blended;
 3. Date the material was received;
 4. Amount of material and type of container; and
 5. Description of the material including chemical composition.
- (f) Daily records of the materials burned in the Waste Incinerator, the combustion temperatures, and the OPLs must be maintained. Daily records of the time, duration, and reasons for each automatic waste feed cutoff actuation.
- (g) The owner and operator of the Waste Incinerator shall maintain a system that will allow citizens of the Township to, at any time, access CEM emissions data, combustion temperature data, and OPL data via a publicly accessible website.

Section 9 – Licensing and Fees

All Waste Incinerators subject to this ordinance must obtain a waste incinerator license by submitting an application to the Township providing all required information and tendering a payment of \$15,000. All funds received through this Section will be placed in a dedicated account by the Township to be used exclusively for the operation of the programs under this ordinance.

Section 10 – Enforcement Orders

(a) The Township's codes enforcement officer or any other duly authorized agent or designee shall have the power and duty to enforce the provisions of this ordinance.

(b) The Township may issue such orders as are necessary to aid in the enforcement of the provisions of this ordinance. These orders shall include, but are not limited to: orders requiring persons to cease unlawful activities or cease operation of a Waste Incinerator which, in the course of its operation, is in violation of any provision of this ordinance; orders to take corrective action or to abate a public

nuisance; orders requiring the testing, sampling, or monitoring of emissions from the Waste Incinerator; or orders requiring production of information. Such an order may be issued if the Township finds that any emissions from the Waste Incinerator are causing or contributing to an unacceptable risk to human health or if the Township finds that any person is in violation of any provision of this ordinance.

(c) The Township may, in its order, require compliance with such conditions as are necessary to affect the purposes of this ordinance.

(d) An order issued under this section shall take effect upon notice, unless the order specifies otherwise.

(e) The authority of the Township to issue an order under this section is in addition to any remedy or penalty which may be imposed pursuant to this ordinance. The failure to comply with any such order is hereby declared to be a public nuisance.

Section 11 – Responsibility of Owners and Operators

(a) Whenever the Township finds that air pollution or danger of air pollution is or may be resulting from a Waste Incinerator, the Township may order the owner or operator to take corrective action in a manner satisfactory to the Township, or it may order the owner or operator to allow access to the land or the Waste Incinerator by the Township or a third party to take such action.

(b) For purposes of collecting or recovering the costs involved in taking corrective action or pursuing a cost recovery action pursuant to an order or recovering the cost of litigation, oversight, monitoring, sampling, testing and investigation related to a corrective action, the Township may collect the amount in the same manner as civil penalties are assessed and collected following the process for assessment and collection of a civil penalty contained in Section 9.1 of the Pennsylvania Air Pollution Control Act, 35 P.S. §4009.1.

Section 12 – Criminal and Civil Penalties

(a) Criminal Penalties

Any person who violates any provision of this ordinance or any order of the Township issued pursuant to this ordinance commits a summary offense and shall, upon conviction, be sentenced to pay a fine of not less than one hundred dollars (\$100.00) nor more than two thousand five hundred dollars (\$2,500.00) for each separate offense, including the costs of prosecution including attorneys' fees, expert witnesses and costs of suit, and, in default of the payment of such fine, may be sentenced to imprisonment for ninety (90) days for each separate offense. Employees or any other duly authorized agent or designee of the Township authorized to conduct inspections or investigations are hereby declared to be law enforcement officers authorized to issue or file citations for summary violations under this ordinance, and Counsel for the Township is hereby authorized to prosecute these offenses. For purposes of this section, a summary offense may be prosecuted before any district justice in this Township. There is no accelerated rehabilitative disposition authorized for a summary offense.

(b) Civil Penalties

1. In addition to proceeding under any other remedy available at law or in equity for a violation of a provision of this ordinance or any order issued pursuant to this ordinance, the Township

may assess a civil penalty for the violation. The penalty may be assessed whether or not the violation was willful. The civil penalty so assessed shall not exceed twenty-five thousand dollars (\$25,000.00) per day for each violation, including the costs of prosecution including attorneys' fees, expert witnesses and costs of suit. In determining the amount of the penalty, the Township shall consider the willfulness of the violation; damage to air, soil, water, or other natural resources of the Township or their uses; financial benefit to the person in consequence of the violation; deterrence of future violations; cost to the Township; the size of the Waste Incinerator; the compliance history of the Waste Incinerator; the severity and duration of the violation; degree of cooperation in resolving the violation; the speed with which compliance is ultimately achieved; whether the violation was voluntarily reported; other factors unique to the owners or operators of the Waste Incinerator; and other relevant factors.

2. When the Township proposes to assess a civil penalty, it shall inform the person of the proposed amount of the penalty. The person charged with the penalty shall then have thirty (30) days to pay the proposed penalty in full; or if the person wishes to contest the amount of the penalty or the fact of the violation to the extent not already established, the person shall forward the proposed amount of the penalty to the New Milford Township Board of Supervisors within the thirty (30) day period for placement in an escrow account with the State Treasurer or any Commonwealth bank or post an appeal bond to the New Milford Township Board of Supervisors within thirty (30) days in the amount of the proposed penalty, provided that such bond is executed by a surety licensed to do business in the Commonwealth and is satisfactory to the Township. If, through administrative or final judicial review of the proposed penalty, it is determined that no violation occurred or that the amount of the penalty shall be reduced, the New Milford Township Board of Supervisors shall, within thirty (30) days, remit the appropriate amount to the person with any interest accumulated by the escrow deposit. Failure to forward the money or the appeal bond at the time of the appeal shall result in a waiver of all legal rights to contest the violation or the amount of the civil penalty unless the appellant alleges financial inability to prepay the penalty or to post the appeal bond. The New Milford Township Board of Supervisors shall conduct a hearing to consider the appellant's alleged inability to pay within thirty (30) days of the date of the appeal. The New Milford Township Board of Supervisors may waive the requirement to prepay the civil penalty or to post an appeal bond if the appellant demonstrates and the New Milford Township Board of Supervisors finds that the appellant is financially unable to pay. The New Milford Township Board of Supervisors shall issue an order within thirty (30) days of the date of the hearing to consider the appellant's alleged inability to pay. The amount assessed after administrative hearing or after waiver of administrative hearing shall be payable to the Township and shall be collectible in any manner provided by law for the collection of debts, including the collection of interest on the penalty amount computed in accordance with section 6621(a)(2) of the Internal Revenue Code of 1986 (Public Law 99-514, 26 U.S.C. 51 et seq.) from the date of assessment of the penalty. If any person liable to pay any such penalty neglects or refuses to pay the same after demand, the amount, together with interest and any costs that may accrue, shall constitute a debt of such person, as may be appropriate, to the Township. The debt shall constitute a lien on all property owned by said person when a notice of lien incorporating a description of the property of the person subject to the action is duly filed with the prothonotary of the court of common pleas where the property is located. The prothonotary shall promptly enter upon the civil judgment or order docket, at no cost to the Township, the name and address of the person, as may be appropriate, and the amount of the lien as set forth in the notice of lien. Upon entry by the prothonotary, the lien shall attach to the revenues and all real and personal property of the person, whether or not the person is solvent. The notice of lien, filed pursuant to this Section, which affects the property of the person shall create a lien with priority over all subsequent claims or liens which are filed against the person, but it shall not affect any valid lien, right, or interest in the property filed in accordance with established procedure.

prior to the filing of a notice of lien under this section.

3. The owner and operator of a Waste Incinerator shall submit annual reports by March 1 of each year for the previous calendar year to the Township listing all violations of emission limits identified in this ordinance. The civil penalty for each reported violation shall be one thousand dollars (\$1,000) per day and payment of the total penalty shall be due to the Township by the following April 1.

Section 13 – Unlawful Conduct

It shall be unlawful for any person to fail to comply or assist in the violation of the provisions of this ordinance or to fail to comply with any order or requirement of the Township; or to cause a public nuisance; or to cause an unacceptable human health risk resulting from emissions from the Waste Incinerator; or to hinder, obstruct, prevent, or interfere with the Township or its personnel in their performance of any duty hereunder, including denying the Township access to the land or Waste Incinerator; or to violate the provisions of 18 Pa.C.S. § 4903 (relating to false swearing) or § 4904 (relating to unsworn falsification to authorities) in regard to papers required to be submitted under this ordinance.

Section 14 – Public Nuisances

A violation of this ordinance or of any order issued by the Township under this ordinance shall constitute a public nuisance. The Township shall have the authority to order any person causing a public nuisance to abate the public nuisance. In addition, when abating a public nuisance, the Township may recover expenses of abatement following the process for assessment and collection of a civil penalty contained in Section 9.1 of the Pennsylvania Air Pollution Control Act, 35 P.S. §4009.1. Whenever a nuisance is maintained or continued contrary to this ordinance or any order issued pursuant to this ordinance, the nuisance may be abatable in the manner provided in this ordinance. However, nothing contained herein shall limit the Township to proceed under any other remedy available at law or in equity. Any person who causes the public nuisance shall be liable for the cost of abatement.

Section 15 – Right to Appeal

(a) Any person directly affected by a final decision of the Township or order issued under this ordinance shall have the right to appeal to New Milford Township Board of Supervisors by filing a written application for appeal with the Township Secretary within twenty (20) days after the final decision or order. Provided a written application for appeal is timely filed, a hearing will be scheduled before New Milford Township Board of Supervisors and the appellant will be provided at least ten (10) days' notice of the hearing.

(b) An appeal under this section shall not act as a supersedeas, provided, however, that upon application and for cause shown, the New Milford Township Board of Supervisors may issue such a supersedeas.

(c) The appeals process under this Section shall be conducted in accordance with the Administrative Law and Procedure Act, 2 PS §101 et seq.

Section 16 – Citizen Enforcement

Any Township resident shall have the authority to bring a civil action against the owner or operator of a Waste Incinerator to compel compliance with this ordinance’s provisions and/or to seek civil penalties for a violation of a provision of this ordinance or any order issued pursuant to this ordinance. A civil action under this section may not be commenced prior to thirty (30) days after the plaintiff had given notice in writing of the noncompliance to the Township and to the owner or operator of the Waste Incinerator.

Section 17. - Severability

If any clause, sentence or other provisions of this ordinance should be declared unconstitutional, illegal, or invalid, such unconstitutionality, illegality, or invalidity shall not affect the remaining provisions of this ordinance, and the Township declares that it would have adopted this ordinance had such unconstitutional, illegal or invalid provisions not been contained herein.

Section 18 – Effective Date

That this ordinance shall become effective five (5) days after its adoption.

ENACTED AND ORDAINED this _____ day of January, 2017 by the Board of Supervisors of the Township of New Milford, Susquehanna County, Commonwealth of Pennsylvania, in lawful session, duly assembled.

ATTEST:

JULENE GRAHAM
Township Secretary

DONALD SHIBLEY

JACK CONROY

SCOTT FERENCZI

TABLE 1
WASTE INCINERATOR EMISSION LIMITS

Pollutant	Emission Limit (units as noted)	Reference
Total Particulate Matter (PM)	0.008 gr/dscf	40 CFR 60 Subpart Ec for Large Incinerators
Sulfur Dioxide (SO ₂)	1.4 ppm	40 CFR 60 Subpart Ec for Small and Medium Incinerators
Nitrogen Oxides (NO _x)	67 ppm	40 CFR 60 Subpart Ec for Small and Medium Incinerators
Carbon Monoxide (CO)	1.8 ppm	40 CFR 60 Subpart Ec for Medium Incinerators
Volatile Organic Compounds (VOC)	10 ppm and 99.9999% removal efficiency for each principal organic hazardous constituent	40 CFR 63 Subpart EEE, NYSDEC 6 CRR-NY 373-2.15
Mercury (Hg)	0.0013 mg/dscm	40 CFR 60 Subpart Ec for Large Incinerators
Dioxins/Furans	0.0057 ng/dscf	40 CFR 63 Subpart EEE
Hydrochloric Acid/Chlorine Gas (HCl/Cl ₂)	21 ppm @ 7% O ₂	40 CFR 63 Subpart EEE
Lead/Cadmium	0.12 mg/dscm	40 CFR 63 Subpart EEE
Arsenic	0.21 mg/dscm	OAC Chapter 3745-75
Beryllium	0.026 mg/dscm	OAC Chapter 3745-75
Chromium	0.075 mg/dscm	OAC Chapter 3745-75
Nickel	0.65 mg/dscm	OAC Chapter 3745-75

NOTES:

Emission limits are in-stack pollutant concentration limits that apply on a 1-hour average basis.

Compliance with the limits must be demonstrated by continuous emissions monitors (CEM) for PM, SO₂, NO_x, CO, VOC, HCl/Cl₂, and Hg.

Compliance with the dioxin/furan and metal limits must be demonstrated by annual stack testing.

Basis for each limit is identified as either a Federal incinerator regulation under 40 CFR Parts 60 or 63, or a State incinerator regulation.