Division of Air Resources

Permit Review Report

Permit ID: 9-2924-00110/00002
Renewal Number: 2
03/27/2025

Facility Identification Data
Name: MODEL CITY ENERGY FACILITY
Address: 1447 PLETCHER RD
YOUNGSTOWN, NY 14174

Owner/Firm
Name: MODEL CITY ENERGY LLC
Address: 201 Helios Way Fl 6
Houston, TX 77079, USA
Owner Classification: Corporation/Partnership

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Permit Description

Introduction

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project

This application is for the renewal of the Title V operating permit issued to Model City Energy, LLC. The current Title V operating permit (9-2924-00110/00002) expired 3/22/2016. The application has been updated to include provisions of the RICE NESHAP (40 CFR Part 63

Subpart ZZZZ) that are applicable to the existing treated landfill gas fueled RICE-generator sets and the existing diesel fueled (compression ignition) standby generator.

Attainment Status
MODEL CITY ENERGY FACILITY is located in the town of LEWISTON in the county of NIAGARA. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10μ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MARGINAL NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.
** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:
The Model City Energy facility is located adjacent to the Modern Landfill at Pletcher and Harold Roads in Youngstown, Niagara County, NY. The Facility receives landfill gas that is collected from the Landfill, treats the gas with appropriate equipment and processes, and uses the gas to fuel up to eleven internal combustion RICE generator sets. The electricity generated by the Facility is sold for resale in New York and New England. The total nameplate capacity of the project is 11.2 MW.

Permit Structure and Description of Operations
The Title V permit for MODEL CITY ENERGY FACILITY
is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a

stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:
combustion - devices which burn fuel to generate heat, steam or power
incinerator - devices which burn waste material for disposal
control - emission control devices
process - any device or contrivance which may emit air contaminants that is not included in the above categories.

MODEL CITY ENERGY FACILITY is defined by the following emission unit(s):

Emission unit 2MCENG - This EU consists of four (4) Caterpillar G3520 RICE generator sets (Process 001) that are housed in building ENGBLDG. Landfill gas (LFG) that is produced by the decomposition of municipal solid waste in the adjacent Modern Landfill, are collected by the landfill and delivered to the Model City Energy Facility (2-MCENG) where it is treated in an LFG treatment system and used as a fuel in the CAT 3520 RICE. Each RICE is equipped with a single exhaust stack, which are identified as exhaust stacks ENG08 through ENG11, are aligned in an east to west direction with ENG08 being situated farthest to the east. The electricity that is produced by this equipment is sold on the open market.

Each IC engine has a crankcase ventilator for engine oil. The purpose of the crankcase ventilator is to remove water vapor from the crankcase in order to prevent water, which may contain an oil mist, from collecting in the oil pan. The breather vent in each engine removes the vapors generated within the crankcase and directs it to a Solberg oil mist eliminator. Any visible oil mist from the Solberg is captured and coalesces/drops out into a vessel, and the vent from the system is exhausted outside ENGBLDG. The coalescing element is rated for 0.3 micron; 99.97% efficiency.

A landfill gas (LFG) treatment system (filtration, compression, cooling and dewatering) is utilized in accordance with 40 CFR 63.1959(b)(2)(iii)(C). Components of the specified gas treatment system are not equipped with atmospheric vents. Therefore, all of the landfill gas received and treated by the system is directed to the four (4) Caterpillar G3520C IC engines for use as a fuel.

Ancillary Equipment with insignificant emissions [exempt pursuant to 6 NYCRR Part 201-3.1(b)(1)] that supports the electricity generation operations.

The process 001 engine radiator coolant (new and used) is stored in separate above ground holding tanks located near ENGBLDG. The new lube oil storage tank has a design capacity of 10,000 gallons; the used oil tank has a design capacity of 2,000 gallons. The aboveground storage tanks (new and used coolant, and the new and used oil) are exempt from permitting pursuant to 6 NYCRR Part 201-3.2(c)(25).

Process 001 has dump radiator heater onsite which utilizes waste heat from the engines. Since this heat is "recycled," there are no emissions associated with the operation of this equipment. There is a backup propane heater available at the Facility (heat input less than 10 million BTU per hour) which is exempt from permitting pursuant to 6 NYCRR Part 201-3.2(c)(1).

The emission unit includes a 100 kilowatt (kW) compression ignition engine-generator set that is operated to supply power to the facility's emergency lighting system when utility outages occur. This has been assigned Process 002. The emergency standby generator is fueled with low sulfur diesel fuel that is supplied from a 200-gallon above ground storage tank.

Emission unit 2MCENG is associated with the following emission points (EP):
ENG08, ENG09, ENG10, ENG11
Process: 001 is located at GROUND, Building ENGBLDG - This emission unit consists of four (4) Caterpillar G3520C RICE generator sets (Process 001) that are housed in building (ENGBLDG). Landfill gas (LFG) that is produced by the decomposition of municipal solid waste in the nearby Modern Landfill and collected by the landfill is transferred to the Model City Energy Facility where it is treated in an LFG treatment system and used to fuel the Caterpillar G3520C RICE. Each RICE is equipped with a single exhaust stack, which are identified as exhaust stacks ENG08 thru ENG11, and are aligned in an east to west direction with ENG08 being situated farthest to the east. The electricity produced by this equipment is sold to the open market.

Process: 002 is located at ground, Building ENGBLDG - Process 002 consists of a 100 kW (157 HP) Olympian D100P4 compression-ignition standby emergency generator-set that is fueled with diesel fuel. The unit is exempt from permitting pursuant to 6-NYCRR 201-3.2(c)(3)(ii), however, it is subject to 40 CFR Part 63 Subpart ZZZZ (RICE NESHAP) as an existing emergency engine. The emergency generator set is only operated during power outages and for maintenance and readiness testing. The RICE NESHAP allows for unlimited emergency operating hours, limits operation to 50 hours per year in non-emergency situations, and allows up to 100 hours per year for a combination of non-emergency operation, maintenance, and readiness testing.

Emission unit 1MCENG - This EU consists of seven (7) Caterpillar G3516 RICE generator sets (Process MC1) that are housed in building BLDG1. Landfill gas (LFG) that is produced by the decomposition of municipal solid waste in the adjacent Modern Landfill, are collected by the landfill and delivered to the Model City Energy Facility (1-MCENG) where it is treated in an LFG treatment system and used as a fuel in the CAT 3516 RICE. Each RICE is equipped with a single exhaust stack, which are identified as exhaust stacks ENG01 through ENG07, are aligned in an east to west direction with ENG01 being situated farthest to the east. The electricity that is produced by this equipment is sold on the open market.

Each IC engine has a crankcase ventilator for engine oil. The purpose of the crankcase ventilator is to remove water vapor from the crankcase in order to prevent water, which may contain an oil mist, from collecting in the oil pan. The breather vent in each engine removes the vapors generated within the crankcase and directs it to a Solberg oil mist eliminator. Any visible oil mist from the Solberg is captured and coalesces/drops out into a vessel, and the vent from the system is exhausted outside 1BLDG. The coalescing element is rated for 0.3 micron; 99.97% efficiency.

A landfill gas (LFG) treatment system (filtration, compression, cooling and dewatering) is utilized in accordance with 40 CFR 63.1959(b)(2)(iii)(C). Components of the specified gas treatment system are not equipped with atmospheric vents. Therefore, all of the landfill gas received and treated by the system is directed to the seven (7) Caterpillar G3516 IC engines for use as a fuel.

Ancillary Equipment with insignificant emissions [exempt pursuant to 6 NYCRR Part 201-3.1(b)(1)] that supports the electricity generation operations.

The process MC1 engine radiator coolant (new and used) is stored in separate above ground holding tanks located near BLDG1. The new and used engine radiator coolant storage tanks each have design capacities of 1,000 gallons.

The process MC1 engine lube oil (new and used) is stored in separate above ground storage tanks located near building BLDG1. The new lube oil storage tank has a design capacity of 8,000 gallons; the used oil tank has a design capacity of 2,000 gallons. The aboveground storage tanks (new and used coolant, and the new and used oil) are exempt from permitting pursuant to 6 NYCRR Part 201-3.2(c)(25).

Process MC1 has dump radiator heater onsite which utilizes waste heat from the engines. Since this heat is “recycled,” there are no emissions associated with the operation of this equipment. There is a backup propane heater available at the Facility (heat input less than 10 million BTU per hour) which is exempt from permitting pursuant to 6 NYCRR Part 201-3.2(c)(1).

Emission unit 1MCENG is associated with the following emission points (EP):
ENG01, ENG02, ENG03, ENG04, ENG05, ENG06, ENG07
Process: MC1 is located at GROUND, Building BLDG1 - Process MC1 consists of seven (7) CAT 3516 reciprocating internal combustion engine (RICE) generator sets that are fueled with treated LFG. At a maximum heat input rate of 8.6 million BTU/hr LHV per engine and a minimum fuel heating value requirement of 350 Btu/scf LHV, the maximum fuel use rate for each CAT 3516 RICE is approximately 410 scfm per engine. Seven (7) RICE continuously operating at a maximum capacity for 8760 hours per year results in a maximum potential fuel use rate of 1,508 million cubic feet per year (MMcf/yr).

Title V/Major Source Status
MODEL CITY ENERGY FACILITY is subject to Title V requirements. This determination is based on the following information:

The facility is a major source for Oxides of Nitrogen and Carbon Monoxide.

Program Applicability
The following chart summarizes the applicability of MODEL CITY ENERGY FACILITY with regards to the principal air pollution
regulatory programs:

Regulatory Program	Applicability
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:
PSD Prevention of Significant Deterioration (40 CFR 52.21, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific

contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status
Facility is in compliance with all requirements.

SIC Codes
SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code	Description
4911	ELECTRIC SERVICES
4925	GAS PRODUCTION/DISTRIBUTION
4931	ELEC & OTHER SERVICES COMBINED

SCC Codes
SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information.Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

SCC Code	Description
2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC

	GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-01-008-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - LANDFILL GAS Reciprocating

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant , including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000071-43-2	BENZENE	318.8			
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	121256000			
000630-08-0	CARBON MONOXIDE	960000			
000074-84-0	ETHANE	29148.1			
000050-00-0	FORMALDEHYDE	4377.9			
007647-01-0	HYDROGEN CHLORIDE	36287.4			
007783-06-4	HYDROGEN SULFIDE	294.1			
0NY210-00-0	OXIDES OF NITROGEN	380000			
0NY075-00-0	PARTICULATES	80000			
000109-66-0	PENTANE	258.8			
0NY075-00-5	PM-10	40000			
0NY075-02-5	PM-2.5	40000			
000074-98-6	PROPANE	533.7			
007446-09-5	SULFUR DIOXIDE	56000			
000108-88-3	TOLUENE	3948.4			
0NY100-00-0	TOTAL HAP	128000			
0NY998-00-0	VOC	20000			
001330-20-7	XYLENE, M, O & P MIXT.	1400.8			

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: **Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)**
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item B: **Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)**

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item C: **Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)**
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official.This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item D: **Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)**
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item E: **Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item F: **Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)**
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item G: **Property Rights - 6 NYCRR 201-6.4(a)(6)**
This permit does not convey any property rights of any sort or any exclusive privilege.

Item H: **Severability - 6 NYCRR Part 201-6.4(a)(9)**

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;

ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;

iii. The applicable requirements of Title IV of the Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess

emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
(3) During the period of the emergency the facility owner or

operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	48	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 60-A	27	General provisions
FACILITY	40CFR 60-A.4	28	General provisions - Address
FACILITY	40CFR 60-IIII	29	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
FACILITY	40CFR 60-JJJJ	30	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

FACILITY	40CFR 63-AAAA.1959(b)	31	NMOC Calculation Procedures
FACILITY	40CFR 63-ZZZZ	32	Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 68	17	Chemical accident prevention provisions
FACILITY	40CFR 82-F	18	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.3	19	False Statement.
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	9	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	49	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	10	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	11	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	13	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	20, 33, 34	Title V Permits and the Associated Permit Conditions
1-MCENG	6NYCRR 201-6	36	Title V Permits and the Associated Permit Conditions
2-MCENG	6NYCRR 201-6	42	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	15	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	21	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)	22	Operational Flexibility
FACILITY	6NYCRR 201-7.1	23, 35	Emission Capping in Facility Permits
FACILITY	6NYCRR 202-1.1	16	Required emissions tests.

FACILITY	6NYCRR 202-1.2	24	Notification.
FACILITY	6NYCRR 202-2.4(a)(3)	25	Emission statement methods and procedures
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	50	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	26	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	8	Open Fires - Prohibitions
1-MCENG	6NYCRR 227-1.3(c)	39	Annual Tune-up Requirement
2-MCENG	6NYCRR 227-1.3(c)	45	Annual Tune-up Requirement
1-MCENG	6NYCRR 227-1.4(a)	40	Opacity Standard
2-MCENG	6NYCRR 227-1.4(a)	46	Opacity Standard
1-MCENG	6NYCRR 227-2.4(f)(2)	41	Emission limit for engines running on landfill gas.
2-MCENG	6NYCRR 227-2.4(f)(2)	47	Emission limit for engines running on landfill gas.

Applicability Discussion:
Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-0301
This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6
Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7
Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4
This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7
Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6
This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.4 (c) (3) (ii)
This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (4)
This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)
Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 202-1.1
This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.5
This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2
This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68
This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F
Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery

practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements
In addition to Title V, MODEL CITY ENERGY FACILITY has been determined to be subject to the following regulations:

40 CFR 60.4
This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 63.1959 (b)
This citation requires the owner or operator of a municipal solid waste landfill with a design capacity greater than 2.5 million megagrams and 2.5 million cubic meters to install a landfill gas collection and control system upon meeting the applicable NMOC or methane emission standards.

40 CFR Part 60, Subpart A
This regulation contains the General Provisions of 40 CFR 60. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements

40 CFR Part 60, Subpart IIII
Subpart IIII applies to new and reconstructed compression ignition reciprocating internal combustion engines. Sources subject to Subpart IIII must comply with emission standards for hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter.

40 CFR Part 60, Subpart JJJJ
Subpart JJJJ applies to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in §60.4230, paragraphs (a)(1) through (6). Sources subject to Subpart JJJJ must comply with emission standards for nitrogen oxides, carbon monoxide, and volatile organic compounds.

40 CFR Part 63, Subpart ZZZZ
Subpart ZZZZ applies to reciprocating internal combustion engines. Sources subject to Subpart ZZZZ must limit emissions of carbon monoxide and formaldehyde. Sources must also comply with work practice standards and operating limits.

6 NYCRR 200.3
No person shall make a false statement in connection with applications, plans, specifications and/or

reports submitted pursuant to this Subchapter.

6 NYCRR 201-6.4 (f)
This section describes the potential for certain operational changes to be made by the facility owner or operator without first obtaining a permit modification. Changes made pursuant to this provision must meet all of the criteria described in this section to qualify for consideration as operational flexibility. The Department reserves the right to require the facility owner or operator to obtain a permit modification prior to making any changes at the facility pursuant to this section.

6 NYCRR 201-7.1
This section of Part 201-7 specifies the criteria that need to be met in order to restrict emissions to avoid Title V or other applicable requirements using federally enforceable permit conditions permit.

6 NYCRR 202-1.2
This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.

6 NYCRR 202-2.4 (a) (3)
Once a facility is required to submit annual emission statements electronically, emission statements must be submitted to the department per the specified schedule, in this regulation beginning the reporting year that a Title V permit containing a condition mandating electronic submittal is issued.

6 NYCRR 211.1
This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 227-1.3 (c)
This subdivision requires that all stationary combustion installations subject to this subpart perform an annual tune-up. The facility will perform monthly tune-ups equivalent to an annual tune-up.

6 NYCRR 227-1.4 (a)
This subdivisions sets the opacity standard for subject stationary combustion installations.

6 NYCRR 227-2.4 (f) (2)
This regulation sets the limit for emissions of oxides of nitrogen from internal combustion engines running on landfill gas at 2.0 grams per brake horsepower-hour. The owner/operaator of the engine must test the emissions one during the term of the permit.

Compliance Certification
Summary of monitoring activities at MODEL CITY ENERGY FACILITY:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	31	record keeping/maintenance procedures
1-MCENG	36	intermittent emission testing
2-MCENG	42	intermittent emission testing
FACILITY	4	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
1-MCENG	37	monitoring of process or control device parameters as surrogate
1-MCENG	38	monitoring of process or control device parameters as surrogate
2-MCENG	43	monitoring of process or control device parameters as surrogate
2-MCENG	44	monitoring of process or control device parameters as surrogate
1-MCENG	39	record keeping/maintenance procedures
2-MCENG	45	record keeping/maintenance procedures
1-MCENG	40	monitoring of process or control device parameters as surrogate
2-MCENG	46	monitoring of process or control device parameters as surrogate
1-MCENG	41	intermittent emission testing
2-MCENG	47	intermittent emission testing

Basis for Monitoring
Model City Energy Facility has accepted a cap of 240 tons per year of Carbon Monoxide (CO) on the seven Model G3516 engines and the stationary combustion sources at Modern Landfill. Operation of the engines below the permitted CO emission rates will ensure emissions do not exceed the applicability threshold of Prevention of Significant Deterioration (40CFR52.21). The facility must calculate and record the 12-month rolling total CO emissions from stationary combustion sources at Modern Landfill and the seven Model G3516 engines. Emissions from Modern Landfill will be determined by monitoring the amount of fuel used at the facility and applying emission factors approved by the Department. The facility must track the kilowatt-hour (kwh) output of each engine and use an emission factor developed from the most recent performance test to calculate the 12-month rolling total of CO emissions from the engines.

Model City Energy Facility has accepted a cap of 240 tons per year of Carbon Monoxide (CO) on the four Model G3520 engines. Operation of the engines below the permitted CO emission rates will ensure emissions do not exceed the applicability threshold of Prevention of Significant Deterioration (40CFR52.21). The facility must track the kilowatt-hour (kwh) output of each engine and use an emission factor developed from the most recent performance test to calculate the 12-month rolling total of CO emissions from the engines.

Model City Energy Facility has accepted a cap of 95 tons per year of Oxides of Nitrogen (NOx) on the seven Model G3516 engines and the stationary combustion sources at Modern Landfill. This cap will allow the engines to not be subject to the New Source Review (NSR) regulations. The facility must calculate and record the 12-month rolling total NOx emissions from stationary combustion sources at modern landfill and the seven Model G3516 engines. Emissions from Modern Landfill will be determined by monitoring the amount of fuel used at the facility and applying emission factors approved by the Department. The facility must track the kilowatt-hour (kwh) output of each engine and use an emission factor developed from the most recent performance test to calculate the 12-month rolling total of NOx emissions from the engines.

Model City Energy Facility has accepted a cap of 95 tons per year of Oxides of Nitrogen (NOx) on the four Model G3520 engines. This cap will allow the engines to not be subject to the New Source Review (NSR) regulations. The facility must track the kilowatt-hour (kwh) output of each engine and use an emission factor developed from the most recent performance test to calculate the 12-month rolling total of NOx emissions from the engines. The emissions factor is calculated as follows: lb/hr NOx emission rate measured during stack test divided by the kwh output from the engine during the test equals the lb/kwh emission factor.