



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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FINAL AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Commonwealth New Bedford Energy, LLC
7 Winslow Way
Mansfield, MA 02048

INFORMATION RELIED UPON:

Application No. 17-AQ14/12-000003-APP
Application No. 4B04015
Approval No. SE-13-020
ePlace Authorization No.: AQ-14-0000105

FACILITY LOCATION:

Commonwealth New Bedford Energy, LLC
300 Samuel Barnet Boulevard
Dartmouth, MA

FACILITY IDENTIFYING NUMBERS:

AQ ID: 1200624
FMF FAC No.: 402936
FMF RO No.: 402937

NATURE OF BUSINESS:

Electric Power Generation

Standard Industrial Classification (SIC): 4911
North American Industrial Classification System (NAICS): 221117

RESPONSIBLE OFFICIAL:

Name: Mr. Thomas Yeransian
Title: Principal of Commonwealth Resource Management Corporation, Managing Member of Commonwealth New Bedford Energy

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This Operating Permit shall expire on July 23, 2025.

For the Department of Environmental Protection

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Permit Chief, Bureau of Air and Waste

July 23, 2020

Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

Commonwealth New Bedford Energy, LLC, (CNBE) operates the Greater New Bedford LFG Utilization Project, a landfill gas (LFG) to energy, electric power generation facility (“Facility”) located at the Crapo Hill Landfill in Dartmouth, Massachusetts, with a United States Postal Service mailing address of 300 Samuel Barnet Boulevard, New Bedford MA 02745. The facility is a Major Source, as defined in 310 CMR 7.00: Appendix C, of Carbon Monoxide (CO), and therefore subject to the 310 CMR 7.00: Appendix C: Operating Permit and Compliance Program, and the requirement to obtain an Operating Permit. The approved operation consists of up to five (5) identical LFG-fired reciprocating engine/generator sets. The reciprocating engines are Caterpillar Model 3516 engines. Each engine/generator set has a nominal output rating of approximately 825 kW of electricity, and a maximum output rating of 900 kW of electricity. The engines are housed in a generation building. Each engine has a separate exhaust stack, which discharges through the generation building roof at an exhaust height of 30 feet above ground.

The primary fuel supplied to the Facility is LFG generated from the Crapo Hill Landfill, which is owned and operated by the Greater New Bedford Regional Refuse Management District (District). A small quantity of digester gas supplements the LFG fuel supplied to the Facility. CRMC Bioenergy LLC owns and operates an anaerobic digestion facility that is located adjacent to the Facility and supplies the digester gas to CNBE. The anaerobic digestion facility operates in accordance with MassDEP Air Quality Plan Approval SE-13-020, Transmittal X254662, dated September 26, 2013. Both the Facility and anaerobic digestion facility are located on property leased from the District.

As part of the Operating Permit (OP) renewal process, MassDEP evaluated the relationship between the District and CNBE, to determine if the parties were under common control for purposes of implementing the Title V Operating Permit program. Based on a review of the case-specific facts, factors, and circumstances, and informal guidance documents and determination letters from the United States Environmental Protection Agency, MassDEP determined that the District and CNBE do not meet the criteria for common control, and therefore, the two entities should continue to be considered separate sources.

MassDEP also evaluated the relationship between CRMC Bioenergy LLC and CNBE and has determined that CRMC Bioenergy LLC and CNBE meet the criteria for common control for purposes of implementing the Title V Operating Permit program. This anaerobic digester system is identified as Emission Unit No. 8 (EU-8) in this Operating Permit.

Other equipment associated with Emission Unit Nos. 1 through 5 (EU-1 through EU-5) includes a LFG production system which conditions the LFG with a knockout drum, 2 (redundant) blowers, a cooler, and a coalescing filter. The condensate from the conditioned LFG drains into the Landfill's leachate collection system for disposal. The engines are serviced by a closed-loop lubricating oil system that consists of a 2,000-gallon virgin oil tank and a 2,000-gallon waste oil tank. Each engine is cooled by a glycol/water mix that is run through a radiator outside of the building.

The key parameters that govern the facility operation are monitored and recorded through a supervisory control and data acquisition (SCADA) system. This electronic operator interface system allows for remote access to facility operations and is the main monitoring/recordkeeping tool. In addition, the operation of the engine-generators is controlled by General Electric Fanuc programmable logic controllers (PLCs) located in the switchgear for each engine. Controls include air-to-fuel ratio control, load control, electric generation controls and protective relays. The operation and control of the motors are by variable frequency drives (VFDs). The VFDs operate motors that drive the LFG blowers, the cooler, the engine room ventilation fans, and the radiators.

The facility also maintains a cold cleaning degreaser-parts washer identified as Emission Unit No. 6 (EU-6). The parts washer is subject to and operated in accordance with 310 CMR 7.03(8) and 310 CMR 7.18(8)(a).

The OP renewal application includes the addition of Emission Unit No. 7 (EU-7). EU7 is an emergency reciprocating internal combustion engine (RICE) which operates an emergency engine generator, fires No.2 fuel oil, and is rated at 150 kilowatts of power generation output. The unit was installed on November 13, 2014, and is subject to the requirements of 310 CMR 7.26(42) *Emergency Engines and Turbines*, 40 CFR 60 Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

CNBE is considered an Area Source for Hazardous Air Pollutants (HAPs). The facility has proposed to restrict facility-wide HAP emissions to less than twenty-five (25) tons per year (aggregate total HAPs) and less than ten (10 tons per year (any Single HAP). The four (4) existing engines (EU-1, EU-2, EU-3, and EU-4) were installed prior to June 12, 2006. EU-1, EU-2, EU-3, EU-4 are subject to requirements for existing, non-emergency, non-black start, LFG-fired, stationary, spark ignited, reciprocating internal combustion engines (RICE) at 40 CFR Part 63, Subpart ZZZZ. The facility is approved for the installation of one (1) additional engine (EU-5). At the time of installation of EU-5, the Permittee shall notify MassDEP, evaluate the installation according to applicable State and Federal regulations (such as, but not limited to 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 60 Subpart JJJJ), and propose to modify the Operating Permit as necessary. The facility does not currently have any emission units subject to requirements at 40 CFR Part 64, Compliance Assurance Monitoring (CAM).

A list of any exempt activities shall be maintained as indicated in Section 3, Table 2. Operating Permit Section 4, Tables 3, 4, 5, and 6 list the facility emission limits along with monitoring, testing, record-keeping and reporting requirements. Operating Permit Section 4, Table 7 lists regulations that are not applicable to the facility at this time.

The Permittee is subject to the requirements of Greenhouse Gas Emissions Reporting as defined by MassDEP in 310 CMR 7.71(3)(a).

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

Table 1			
EU	Description of EU	EU Design Capacity	Pollution Control Device (PCD)
EU-1 through EU-5 ^(note 1)	Caterpillar Model No. 3516, Internal Combustion Engine	10.07 MMBtu/hr (maximum energy input) 900 kilowatts (maximum generator output)	None
EU-6	Parts Washer (Cold Cleaning Degreaser)	Meets design specifications at 310 CMR 7.18(8)(a)3.	None
EU-7	Emergency Generator Kohler Model 150REOZJF Date of Installation: 2014	Maximum heat rate input 1.725MMBtu/hr Fuel: No. 2 Fuel Oil	None
EU-8	Anaerobic Digestion System	100,000 gallon digester capacity	None

Table 1 Key:

MMBtu/hr = Million British thermal units per hour EU = Emission Unit
 CMR = Code of Massachusetts Regulations No. = number

Table 1 Note:

(1) Facility currently consists of four (4) identical Caterpillar Engines which are identified in this Operating Permit as EU-1, EU-2, EU-3 and EU-4. EU-5 has not yet been installed.

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5)(h)

Table 2 Key:

MassDEP = Massachusetts Department of Environmental Protection
 CMR = Code of Massachusetts Regulations

4. APPLICABLE REQUIREMENTS

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

Table 3					
EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
1,2,3,4,5 (per engine) (Note 2)	Landfill Gas/ Digester Gas	NO _x	N/A	0.166 lb/MMBtu	4B04015 SE-13-020
				0.60 g/bhp-hr	
				0.62 TPM	
				7.32 TPY (Note 1)	
		CO	N/A	0.83 lb/MMBtu	
				3.11 TPM	
				36.61 TPY (Note 1)	
		NMOC	N/A	0.083 lb/MMBtu	
				0.31 TPM	
				3.66 TPY (Note 1)	
		VOC	N/A	0.083 lb/MMBtu	
				0.31 TPM	
				3.66 TPY (Note 1)	
		PM/PM ₁₀ /PM _{2.5}	N/A	0.06 lb/MMBtu	
0.21 TPM					
2.40 TPY (Note 1)					
SO ₂	LFG H ₂ S ≤ 200 ppm _v	0.064 lb/MMBtu			
		0.24 TPM			
				2.81 TPY (Note 1)	
1,2,3,4	Landfill Gas/ Digester Gas	HAP (Note 6)	Change oil and filter every 1440 hours of operation or annually ^(Note 3) , whichever comes first; Inspect spark plugs every 1440 hours of operation or annually, whichever comes first; and Inspect all hoses and belts every 1440 hours of operation or annually, whichever comes first, and replace as necessary.		40 CFR Part 63, Subpart ZZZZ §§ 63.6603(a), 63.6625(j) and Table 2d
			At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.		40 CFR Part 63, Subpart ZZZZ § 63.6605(a) and (b)

Table 3

EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
1,2,3,4	Landfill Gas/ Digested Gas	HAP (Note 6)	i. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.		40 CFR Part 63, Subpart ZZZZ § 63.6625(e) and Table 6
			Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.		40 CFR Part 63, Subpart ZZZZ § 63.6625(h) and Table 2d
1,2,3,4,5 (Combined) (Note 4)	Landfill Gas/ Digester Gas	NO _x	See heat input limit below	3.10 TPM	4B04015 SE-13-020
				36.6 TPY (Note 1)	
		CO	See heat input limit below	15.5 TPM	
				183.0 TPY (Note 1)	
		VOC	See heat input limit below	1.55 TPM	
				18.3 TPY (Note 1)	
		NMOC	See heat input limit below	1.55 TPM	
				18.3 TPY (Note 1)	
		PM/PM ₁₀ /PM _{2.5}	See heat input limit below	Each EU shall reduce NMOC emissions by 98% by weight, or reduce the stack NMOC concentration to < 20 ppm _{vd} , as hexane, at 3% O ₂	
				1.05 TPM	
SO ₂	See heat input limit below	12.2 TPY (Note 1)			
		1.20 TPM			
All	Maximum heat input of LFG/DG shall not exceed 37,460 MMBtu per month	14.0 TPY (Note 1)			
		N/A			
All	Maximum heat input of LFG/DG shall not exceed 440,925 MMBtu in any consecutive 12 month period	N/A			
		N/A			
1,2,3,4,5	Landfill Gas/ Digester Gas	Visible Emissions	Stack emissions shall not exceed 0% opacity (no visible emissions), with the exception of up to five (5) minutes during startup. During startup visible emissions shall comply with the provisions of 310 CMR 7.06.		4B04015 SE-13-020
6	Non-halogenated solvent	VOC	Solvent consumption < 100 gallons per month per unit	Operating procedures identified at 310 CMR 7.18(8)(e); and design features and specifications identified at 310 CMR 7.18(8)(a)	310 CMR 7.03(8) 310 CMR 7.18(8)(a) 310 CMR 7.18(8)(e)

Table 3

EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
7	No 2. Fuel Oil	All	\leq 100 hours per calendar year for maintenance and testing as recommended by the manufacturer; and As part of the above, \leq 50 hours per calendar year for non-emergency situations; and During an emergency		310 CMR 7.26(42)(d)1.a.
			Affected source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart III, for compression ignition engines		40 CFR Part 63, Subpart ZZZZ § 63.6590(c) 310 CMR 7.26(42)(d)1.b.
		NMHC + NO _x	As noted below	4.0 g/kW-hr	40 CFR Part 60, Subpart III § 60.4211(a) and (c) § 60.4205(b) § 60.4202(a)(2)
		CO	As noted below	3.5 g/kW-hr	
		PM	As noted below	0.20 g/kW-hr	40 CFR Part 89 Subpart B § 89.112
		Sulfur in fuel	N/A	\leq 0.0015 percent	310 CMR 7.26(42)(c) 310 CMR 7.05(1)(a)1.: Table 1
		All	N/A	Shall comply with applicable Emission limits set by US EPA for non-road engines (40 CFR 89).	310 CMR 7.26(42)(b)
			Operate and maintain engine and control device according to manufacturer's emission-related written instructions. See Table 4, Proviso No. 19		40 CFR Part 60, Subpart III § 60.4211(a)(1) and (2)
			Limited to operation as noted at § 60.4211(f) for emergency stationary ICE. See Table 4, Provisos Nos. 16, 17, & 18		40 CFR Part 60 Subpart III 310 CMR 7.26(42)(d)1.
		Smoke	N/A	< No. 1 of Chart ⁽¹⁾ , except \geq No. 1 to < No. 2 of Chart for \leq 6 minutes during any one hour, no time to equal or exceed No. 2 of the Chart.	310 CMR 7.26(42)(d)5. 310 CMR 7.06(1)(a)

Table 3					
EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
7	No 2. Fuel Oil	Opacity	N/A	≤ 20 % except >20% to ≤ 40 % for ≤ 2 minutes during any 1 hour	310 CMR 7.26(42)(d)5. 310 CMR 7.06(1)(b)
		Sound		Constructed, located, operated and maintained to comply with 310 CMR 7.10	310 CMR 7.26(42)(d)2. 310 CMR 7.10 (State Only Requirement)
		All	Limited to stack height and Emission dispersion requirements. See Table 4 Proviso No. 21	N/A	310 CMR 7.26(42)(d)3.a.
8	Digester Gas	N/A	3,000 gallons of feedstock per day based on a 90 day rolling average	N/A	SE-13-020
Facility-wide	All	Greenhouse Gas (Note 5)	N/A	N/A	310 CMR 7.71 (State Only Requirement)
	All	Any Single HAP	N/A	< 10 TPY	17-AQ14/12-000003-APP
		Total HAP		< 25 TPY	

Table 3 Key:

Btu = British thermal units
 CFR = Code of Federal Regulations
 CMR = Code of Massachusetts Regulations
 CO = Carbon Monoxide
 DG = Digester Gas
 EU = Emission Unit
 g/bhp-hr = grams per brake horsepower for one hour (engine output)
 g/kW-hr = grams per kilowatt for one hour (engine output)
 HAP = Hazardous Air Pollutant as listed in the 1990 Clean Air Act Amendments, Section 112(b)
 H₂S = Hydrogen Sulfide
 HAP = Hazardous Air Pollutant(s)
 ICE = Internal Combustion Engine
 lb/MMBtu = pound per Million British thermal units
 LFG = Landfill Gas
 MMBtu = Million Btu
 N/A = Not Applicable
 No. = Number
 Nos. = Numbers
 NMHC = Non-Methane HydroCarbons
 NMOC = Non-Methane Organic Compounds

NO_x = Nitrogen Oxides
O₂ = Oxygen
PM = Total Particulate Matter
PM_{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter
PM₁₀ = Particulate Matter less than or equal to 10 microns in diameter
ppm_v = Parts per million, by volume
ppm_{vd} = parts per million, by volume, dry basis
RICE = Reciprocating Internal Combustion Engine
SO₂ = Sulfur Dioxide
TPM = Tons Per Month
TPY = Tons Per consecutive 12-month period ¹
VOC = Volatile Organic Compound
% = Percent
≥ = Greater than or equal to
< = Less than
≤ = Less than or equal to
+ = added to
§ = Section
§§ = Sections

Table 3 Foot Notes:

1. To calculate the amount of a consecutive 12 month rolling period take the current calendar month amount and add it to the previous 11 calendar months total amount.
2. Emission limits listed are for individual emission units.
3. Sources have the option to utilize an oil analysis program as described in § 63.6625(j) in order to extend the specified oil change requirement in Table 2d of this subpart.
4. Emission limits and Heat Input limits represent a combined total for up to five emission units.
5. Greenhouse Gas means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).
6. Hazardous Air Pollutants are as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b).
7. Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by the MassDEP.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

Table 4	
EU	Monitoring And Testing Requirements
EU-1 EU-2 EU-3 EU-4	1. In accordance with Plan Approval No. 4B04015, one operable oxygen analyzer shall be maintained on-site and record shall be maintained of the stack outlet oxygen (O ₂) levels at least once per week on each engine.
	2. As applicable, and in lieu of oil change required in Table 3, analyze engine oil for Total Acid Number, viscosity, and percent water content as specified at 40 CFR §63.6625(j).
	3. In accordance with Plan Approval No. 4B04015, each engine/generator set shall be continuously monitored for run time and kW produced.
	4. In accordance with Plan Approval No. 4B04015, a LFG flow recorder shall be maintained so that an on-site record of the total volume of LFG (scf) fired by the five (5) engine/generator sets will be available by date and time period.
	5. In accordance with Plan Approval No. 4B04015, the heat input of LFG (Btu) fired in each EU shall be determined by gas chromatograph and/or field measurements for each month and for each consecutive 12-month period.
	6. In accordance with 310 CMR 7.00: Appendix C(9)(b)2., monitor the H ₂ S concentration (ppm _v) of the LFG to be combusted on a monthly basis. The sampling shall be conducted using a protocol and test method(s) that are approved by MassDEP.
	7. In accordance with 310 CMR 7.00: Appendix C(9)(b)2., perform monthly visible emissions observations of each engine exhaust, in accordance with 40 CFR Part 60, Appendix A, Method 22, for a time period no less than fifteen (15) minutes while the engines are in operation.
	8. In accordance with Plan Approval No. 4B04015, the ability of the facility to maintain emission rates at or below approved levels shall be demonstrated to the MassDEP in the future if deemed necessary. Compliance testing, if requested by MassDEP, shall be conducted in accordance with MassDEP's "Guideline for Source Emission Testing" and test methods and procedures contained in 40 CFR Part 60, Appendix A.
EU-5	9. In accordance with Plan Approval No. 4B04015, the facility shall be constructed to accommodate the emission testing requirements contained in 40 CFR Part 60, Appendix A.
	10. In accordance with Plan Approval No. 4B04015, emission testing shall be performed to determine compliance with approved CO, NMOC and NO _x emission limits. Emission testing shall be completed within ninety (90) days from the date the engine commences LFG burning after startup of the facility.
	11. Upon installation the Permittee shall conduct, as applicable, monitoring and performance testing required at 40 CFR Part 60 and 40 CFR Part 63.
	12. In accordance with Plan Approval No. 4B04015, a NO _x /CO optimization/minimization diagnostic emission test program shall be conducted prior to emission testing.

Table 4

EU	Monitoring And Testing Requirements
EU-6	<p>13. In accordance with 310 CMR 7.18(8)(h), Persons subject to 310 CMR 7.18(8) shall, upon request of the MassDEP, perform or have performed test to demonstrate compliance. Testing shall be conducted in accordance with a method approved by the MassDEP and USEPA.</p>
	<p>14. In accordance with 40 CFR 60.4206, the Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205(b) and 60.4202(a)(2) over the entire life of the engine.</p> <p>15. In accordance with 310 CMR 7.26(42)(d)1.c., and 40 CFR 60.4209(a), the Permittee must install a non-turn-back hour counter. The non-turn-back hour counter shall be operated and maintained in good working order.</p> <p>16. In accordance with 40 CFR 60.4211(f)(1), the Permittee may operate the emergency stationary ICE for emergency situations with no time limit.</p> <p>17. In accordance with 40 CFR 60.4211(f)(2)(i), the Permittee may operate the emergency stationary ICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year.</p> <p>(i) Emergency Stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.</p>
EU-7	<p>18. In accordance with 40 CFR 60.4211(f)(3), the Permittee may operate the Emergency stationary ICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (f)(2)(i) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.</p> <p>(i) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:</p> <p><i>A. The Engine is dispatched by the local balancing authority or local transmission and distribution system operator;</i></p> <p><i>B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.</i></p> <p><i>C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or Guidelines.</i></p> <p><i>D. The power is provided only to the facility itself or to support the local transmission and distribution system.</i></p> <p><i>E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.</i></p>

Table 4

Table 4	
EU	Monitoring And Testing Requirements
EU-7	19. In accordance with 310 CMR 7.26(42)(e)2., MassDEP may require emission or other monitoring to assure compliance with the requirements of 310 CMR 7.26(42).
	20. In accordance with 310 CMR 7.26(42)(e)3., any testing when required shall comply with the following: <ul style="list-style-type: none"> a) Tests to certify compliance with emission limitations must be performed in accordance with EPA reference Methods, California Air Resources Board Methods approved by EPA, or equivalent methods as approved by MassDEP and EPA. b) Particulate matter from liquid fuel reciprocating engines shall be determined using Method 8178 D2 of the International Organization for Standardization. c) MassDEP may require emission or other testing to assure compliance with the emission limitations or fuel requirements.
	21. In accordance with 310 CMR 7.26(42)(d)3.a., the engine shall utilize an exhaust stack that discharges so as to not cause a condition of air pollution (310 CMR 7.01(1)). Exhaust stacks shall be configured to discharge the combustion gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted combustion gases. Any emission impacts of exhaust stacks upon sensitive receptors including, but not limited to, people, windows and doors that open, and building fresh air intakes shall be minimized by employing good air pollution control engineering practices. Such practices include without limitation: <ul style="list-style-type: none"> i) Avoiding locations that may be subject to downwash of the exhaust; and ii) Installing stack(s) of sufficient height in locations that will prevent and minimize flue gas impacts upon sensitive receptors.
EU-8	22. In accordance with Plan Approval SE-13-020, the Permittee shall continuously monitor the pressure in the Blending and Mixing tank to ensure it is maintained at a negative pressure at all times.
	23. In accordance with Plan Approval SE-13-020, the Permittee shall continuously monitor the biogas production rate of the anaerobic digestion system.
	24. In accordance with Plan Approval SE-13-020, if and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.
Facility-wide	25. In accordance with Plan Approval No. 4B04015 and 310 CMR 7.12, monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement.
	26. In accordance with AQ14/12-000003-APP, the Permittee shall monitor so that comprehensive and accurate records are maintained onsite to demonstrate compliance with the facility-wide HAP emission limits contained in Table 3. Monitor so that records are compiled for actual emissions of all HAPs emitted for each calendar month and for each consecutive twelve-month period and compiled no later than the 15 th day following each month.
	27. In accordance with 310 CMR 7.13(1) Any person owning, leasing, operating or controlling a facility for which the MassDEP has determined that stack testing is necessary to ascertain compliance with the MassDEP's regulations or design approval provisos shall cause such stack testing: <ul style="list-style-type: none"> a) to be conducted by a person knowledgeable in stack testing, b) to be conducted in accordance with procedures contained in a test protocol which has been approved by the MassDEP, c) to be conducted in the presence of a representative of the MassDEP when such is deemed necessary, and d) to be summarized and submitted to the MassDEP with analysis and report within such time as agreed to in the approved test protocol.

Table 4	
EU	Monitoring And Testing Requirements
Facility-wide	<p>28. In accordance with 310 CMR 7.13(2) Any person having control of a facility relative to which the MassDEP determines that stack testing (to ascertain the mass emission rates of air contaminants emitted under various operating conditions) is necessary for the purposes of regulatory enforcement or determination of regulatory compliance shall cooperate with the MassDEP to provide:</p> <ul style="list-style-type: none"> a) entrance to a location suitable for stack sampling, b) sampling ports at locations where representative samples may be obtained, c) tagging and ladders to support personnel and equipment for performing the tests, d) a suitable power source at the sampling location for the operation of sampling equipment, and e) such other reasonable facilities as may be requested by the MassDEP.
	<p>29. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall;</p> <ul style="list-style-type: none"> a) comply with all emissions monitoring and analysis procedures or test methods required under the applicable requirements, including those promulgated pursuant to 42 U.S.C. 7401, §§ 504(a) and 504(b) or 114(a)(3); b) if the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring (which may consist of record keeping designed to serve as monitoring), then the Permittee shall perform periodic monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit. Such monitoring requirements shall assure the use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Record keeping provisions may be sufficient to meet the requirements; and c) comply with requirements concerning the use, maintenance and installation of monitoring equipment or methods as the MassDEP deems appropriate.
	<p>30. In accordance with 310 CMR 7.71(1) and Appendix C(9), the Permittee shall establish and maintain data systems or record keeping practices (e.g. fuel use records, SF₆ usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State Only Requirement)</p>

Table 4 Key:

- Btu= British thermal units
- c. = chapter
- CFR = Code of Federal Regulations
- CMR = Code of Massachusetts Regulations
- CO = Carbon Monoxide
- e.g. = for example
- EU = Emission Unit
- HAP = Hazardous Air Pollutant, as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b)
- H₂S = Hydrogen Sulfide
- ICE = Internal Combustion Engine
- kW = kiloWatt
- LFG = Landfill Gas
- M.G.L. = Massachusetts General Law
- NERC = North American Electric Reliability Corporation
- NMOC = Non-Methane Organic Compound
- NO_x = Nitrogen Oxides
- No. = Number
- O₂ = Oxygen
- ppm_v = parts per million, by volume
- scf = standard cubic foot
- SF₆ = Sulfur Hexafluoride
- SI = Spark Ignition
- U.S.C. = United States Code
- USEPA = United States Environmental Protection Agency
- § = Section
- §§ = Sections

Table 5	
EU	Record Keeping Requirements
EU-1 EU-2 EU-3 EU-4 EU-5	1. In accordance with Plan Approval No. 4B04015, a record of stack oxygen levels, as determined at least weekly during operation, shall be maintained for each engine.
	2. In accordance with Plan Approval No. 4B04015, a copy of the NO _x /CO optimization/minimization program report for each engine shall be maintained on-site.
	3. In accordance with Plan Approval No. 4B04015, a record of the volume of LFG (scf) fired in each engine/generator set for each month and for each consecutive 12 month period shall be maintained on-site. This record shall take into account the total volume of LFG fired by the combined engine/generator sets, and the individual engine/generator set run time and amount of electricity produced.
	4. In accordance with Plan Approval No. 4B04015, the heat input of LFG (Btu) fired in the engine/generator sets for each month and consecutive 12 month period shall be maintained on-site.
	5. In accordance with Plan Approval No. 4B04015, a record of NO _x , CO, NMOC, VOC, PM, and SO ₂ monthly and consecutive 12 month period emission rate records for each engine/generator set shall be maintained on-site.
	6. In accordance with Plan Approval No. 4B04015, a copy of the Standard Operating and Maintenance Procedures for all subject equipment shall be maintained on-site.
	7. In accordance with Plan Approval No. 4B04015, an operation log, or other record keeping system, shall be maintained on-site at a level of detail sufficient to document that the Operation and Emission Limits in Table 3 are not exceeded.
	8. In accordance with 310 CMR 7.00: Appendix C(10)(b), maintain records of the monthly H ₂ S monitoring results to include H ₂ S concentration (ppm _v) in LFG and the corresponding SO ₂ emission calculations.
	9. In accordance with 310 CMR 7.00: Appendix C(10)(b), maintain records of the monthly visible emissions observations to include date and time period of the observations, the result of observations with respect to visible emissions, and a description of the facility operations at the time of the observation.
	10. In accordance with Plan Approval No. 4B04015, all operating and monitoring records, including emission test reports, shall be maintained for the life of the facility; the five most recent years of data/records shall be maintained on-site.
	11. In accordance with 40 CFR 63.6655(a)(2), maintain records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment.
	12. In accordance with 40 CFR 63.6655(a)(5), maintain records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
	13. In accordance with 40 CFR 63.6655(d), maintain records of manufacturer's emission-related operation and maintenance instructions; or the facility maintenance plan, if developed as allowed at 40 CFR 63, Subpart ZZZZ, Table 6.

Table 5	
EU	Record Keeping Requirements
EU-1 EU-2 EU-3 EU-4 EU-5	14. In accordance with 40 CFR 63.6655(d) and (e), maintain records of the maintenance (and monitoring as specified at §63.6625(j), if applicable) conducted on the stationary RICE in order to demonstrate that the RICE was operated and maintained according the requirements of 40 CFR 63, Subpart ZZZZ, Table 2d and Table 6.
EU-6	15. In accordance with 310 CMR 7.03(6) and 7.18(8)(g), prepare and maintain records sufficient to demonstrate continuous compliance as stated in 310 CMR 7.18(8)(f) and with the monthly solvent usage restriction in 310 CMR 7.03(8). Records shall include, but are not limited to: identity, quantity, formulation and density of solvent(s) used and waste solvent(s) generated.
EU-7	16. In accordance with 310 CMR 7.26(42)(f), the Permittee shall maintain records described in 310 CMR 7.26(42)(f)1. through 4. Such records shall be maintained on site or for remote locations, at the closest facility where records can be maintained and shall be made available to MassDEP or its designee upon request. The owner or operator shall certify that records are accurate and true in accordance with 310 CMR 7.01(2)(a) through (c). 1) Information on equipment type, make and model, and rated power output; 2) A log of operations, including date, time and duration of operation and reason for each start per 310 CMR 7.26(42)(d)1., fuel type and supplier; 3) Purchase orders, invoices, and other documents to substantiate information in the log; 4) Copies of certificates and documents from the manufacturer related to certificates.
EU-8	17. In accordance with Plan Approval SE-13-020, the Permittee shall continuously record the pressure in the Blending and Mixing tank to document it is maintained at negative pressure at all times.
	18. In accordance with Plan Approval SE-13-020, the Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. These records shall be compiled no later than the 15 th day following each month.
	19. In accordance with Plan Approval SE-13-020, the Permittee shall maintain records of monitoring and testing as required by Table 4.
	20. In accordance with Plan Approval SE-13-020, the Permittee shall maintain a copy of the most up-to-date SOMP for the EU(s) approved herein on-site.
	21. In accordance with Plan Approval SE-13-020, the Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	22. In accordance with Plan Approval SE-13-020, the Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
Facility-wide	23. In accordance with 310 CMR 7.71 (6) (b) and (c), the Permittee shall keep on site at the facility documents of the methodology and data used to quantify emissions for a period of 5 years from the date the document is created. The Permittee shall make these documents available to MassDEP upon request. (State Only Requirement).

Table 5	
EU	Record Keeping Requirements
Facility-wide	24. In accordance with AQ14/12-000003-APP, the Permittee shall maintain comprehensive and accurate records onsite to demonstrate compliance with the facility-wide HAP emission limits contained in Table 3. A record of all HAPs emitted for each calendar month and for each consecutive twelve-month period shall be maintained on-site. These records shall be compiled no later than the 15 th day following each month.
	25. In accordance with Plan Approval No. 4B04015, a record keeping system shall be established and maintained on-site. All records shall be maintained up-to-date such that the year-to-date information is readily available for MassDEP examination. Record keeping shall, at a minimum, include: <ul style="list-style-type: none"> a) a record of routine maintenance activities performed on emission unit control and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed; and b) a record of all malfunctions on emission unit control and monitoring equipment shall include, at a minimum: the date and time the malfunctions occurred; a description of the malfunctions and the corrective actions taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the emission unit returned to compliance. All records shall be kept on-site for five (5) years and shall be made available to MassDEP personnel upon request.
	26. In accordance with 310 CMR 7.12, maintain records to facilitate compilation of data for the required Source Registration submittal.
	27. In accordance with 310 CMR 7.12(3)(c), copies of Source Registration and other information supplied to MassDEP, to comply with 310 CMR 7.12, shall be retained by the facility owner/operator for five years from the date of submittal.
	28. In accordance with Plan Approval SE-13-020, the Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 5 Key:

- Btu = British thermal units
- CFR= Code of Federal Regulations
- CMR = Code of Massachusetts Regulations
- CO = Carbon Monoxide
- EU = Emission Unit
- HAP = Hazardous air pollutant, as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b)
- H₂S = Hydrogen Sulfide
- LFG = Landfill Gas
- MassDEP = Massachusetts Department of Environmental Protection
- NMOC = Non-Methane organic compounds
- NO_x = Nitrogen Oxides
- No. = Number
- PM = Particulate Matter
- ppm_v = parts per million, by volume
- RICE = Reciprocating Internal Combustion Engine
- scf = standard cubic foot
- SO₂ = Sulfur Dioxide
- VOC = Volatile Organic Compounds
- § = Section

Table 6

Table 6	
EU	Reporting Requirements
EU-1	1. In accordance with Plan Approval No. 4B04015, revisions to the Final Standard Operating and Maintenance Procedures shall be submitted to the MassDEP within seven (7) days from their initial use.
EU-2 EU-3 EU-4 EU-5	2. In accordance with Plan Approval No. 4B04015, the MassDEP’s Permit Chief for the Bureau of Air and Waste at this office must be notified by telephone or electronic mail within 24 hours, and with written notification within ten (10) days, after occurrence of any upsets or malfunctions to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and/or a condition of air pollution.
EU-5	3. In accordance with Plan Approval No. 4B04015, notification to the MassDEP, in writing, shall be made within 10 days from the date that EU-5 commences LFG or digester gas burning.
Facility-wide	4. In accordance with Plan Approval 4B04015 and 310 CMR 7.12, the Permittee shall submit a Source Registration/Emission Statement Form to MassDEP on an annual basis.
	5. In accordance with Plan Approval No. 4B04015, a stack test protocol shall be submitted to the MassDEP at least 30 days prior to the commencing of compliance testing. The final emission report shall be submitted to the MassDEP within 30 days from completion of on-site testing.
	6. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by MassDEP that stack testing is necessary to ascertain compliance with the Department’s regulations or design approval provisos, the Permittee shall cause such stack testing to be summarized and submitted to MassDEP as prescribed in the agreed to pretest protocol.
	7. In accordance with 310 CMR 7.00: Appendix C(10)(c)., the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year).
	8. In accordance with General Condition 10 of this Permit, the Permittee shall submit the Annual Compliance report to MassDEP and USEPA by January 30 of each year.
	9. In accordance with 310 CMR 7.00: Appendix C (10)(f), the Permittee shall promptly report to the MassDEP all instances of deviations from permit requirements. This report shall include the deviation itself, including those attributable to upset conditions as defined in the permit, the probable cause of the deviation, and any corrective actions or preventative measures taken.
	10. Submit Annual Compliance report to MassDEP and USEPA by January 30 of each year and as required by General Condition 10 of this Permit.
	11. In accordance with 310 CMR 7.00: Appendix C (10)(h), all required reports must be certified by a responsible official consistent with 310 CMR 7.00: Appendix C (5)(c).
	12. Unless otherwise noted ^(Note 1) , all notifications and reporting required by this Operating Permit shall be sent to: <div style="text-align: center;"> Department of Environmental Protection Bureau of Air and Waste Southeast Regional Office 20 Riverside Drive Lakeville, MA 02347 ATTN: Chief, Air Permitting Telephone: (508) 946-2770 Electronic mail address: sero.air@mass.gov </div>
	13. In accordance with 310 CMR 7.71(5), the Permittee shall electronically submit and certify by April 15 th of each year a greenhouse gas emissions report to MassDEP. (State Only Requirement) .

Table 6 Key:

EU = Emission Unit
 CMR = CMR = Code of Massachusetts Regulations
 MassDEP = Massachusetts Department of Environmental Protection
 USEPA = United States Environmental Protection Agency
 No. = Number
 LFG = Landfill Gas

Table 6 Note:

(1) The annual Source Registration/Emission Statement shall be submitted to the MassDEP office specified in the instructions.

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7	
Regulation	Reason
310 CMR 7.16: Reduction of Single Occupant Commuter Vehicle Use	Facility is below employee threshold.
40 CFR Part 64: Compliance Assurance Monitoring	Facility has no subject emission units

Table 7 Key:

CFR = Code of Federal Regulations

CMR = Code of Massachusetts Regulations

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

Table 8																																	
EU	Special Terms and Conditions																																
EU-5	1. In accordance with AQ14/12-000003-APP, at the time of installation of EU-5, the Permittee shall notify MassDEP, evaluate the installation according to applicable State and Federal regulations (such as, but not limited to 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 60 Subpart JJJJ), and propose to modify the Operating Permit as necessary.																																
EU-7	2. In accordance with 310 CMR 7.26(42)(b)3., the Permittee shall obtain from the supplier a statement that a certificate of conformity has been obtained from the USEPA. Pursuant to 40 CFR 89.105 as in effect October 23, 1998, any engine certified under the USEPA non-road standards is automatically certified to operate as an emergency engine pursuant to 310 CMR 7.26(42).																																
EU-8	3. In accordance with Plan Approval SE-13-020, in the event that the engines at the facility are not operational, all digested gas from the anaerobic digester system shall be routed to the flare.																																
Facility-wide	<p>4. Emission Units EU-1 through EU-5 construction shall be consistent with the Equipment and Design Schedule in Plan Approval Nos. 4B04015 and SE-13-020 as follows:</p> <table border="0" style="width: 100%;"> <tr> <td colspan="2"><u>Engine/Electric Generator Sets</u></td> </tr> <tr> <td>Manufacturer</td> <td>Caterpillar (or equiv.)</td> </tr> <tr> <td>Model No.</td> <td>3516 (or equiv.)</td> </tr> <tr> <td>Max. Heat Input</td> <td>10.07 MMBtu/hr/engine @ 900 kW</td> </tr> <tr> <td>Fuel</td> <td>Landfill Gas / Digester Gas</td> </tr> <tr> <td>Maximum Output</td> <td>900 kW/generator</td> </tr> <tr> <td>Nominal Output</td> <td>825 kW/generator</td> </tr> <tr> <td>Max. Stack Exit Temperature</td> <td>960 °F</td> </tr> <tr> <td>Stack Material</td> <td>Steel</td> </tr> <tr> <td>Stack Height</td> <td>30 feet above ground</td> </tr> <tr> <td>Stack Exit Diameter</td> <td>12 inches</td> </tr> <tr> <td>Silencer Manufacturer</td> <td>EM Products (or equiv.)</td> </tr> <tr> <td>Silencer Model No.</td> <td>JCS12-X2608 (or equiv.)</td> </tr> <tr> <td colspan="2"><u>Approximate Facility Location</u></td> </tr> <tr> <td>UTM Coordinates</td> <td>334925 East, 4620880 North (Zone 19)</td> </tr> <tr> <td>Latitude/Longitude</td> <td>North 41° 43' 28", West 70° 59'</td> </tr> </table> <p>5. Emission units EU-1 through EU-4 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table 8] to Subpart ZZZZ of 40 CFR 63] except §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), 63.9(g) and 63.9(h) as specified at § 63.6645(a)(5). Compliance with all applicable provisions therein is required.</p> <p>6. In accordance with Plan Approval No. 4B04015, there shall be no direct release or bypass of landfill gas from the facility to the ambient air.</p> <p>7. In accordance with Plan Approval No. 4B04015, sound impacts shall not exceed 10 dB(A) above background and shall not cause a puretone condition as defined in the MassDEP's DAQC Policy No. 90-001. (State Only Requirement)</p>	<u>Engine/Electric Generator Sets</u>		Manufacturer	Caterpillar (or equiv.)	Model No.	3516 (or equiv.)	Max. Heat Input	10.07 MMBtu/hr/engine @ 900 kW	Fuel	Landfill Gas / Digester Gas	Maximum Output	900 kW/generator	Nominal Output	825 kW/generator	Max. Stack Exit Temperature	960 °F	Stack Material	Steel	Stack Height	30 feet above ground	Stack Exit Diameter	12 inches	Silencer Manufacturer	EM Products (or equiv.)	Silencer Model No.	JCS12-X2608 (or equiv.)	<u>Approximate Facility Location</u>		UTM Coordinates	334925 East, 4620880 North (Zone 19)	Latitude/Longitude	North 41° 43' 28", West 70° 59'
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Table 8	
EU	Special Terms and Conditions
Facility-wide	8. In accordance with Plan Approval No. 4B04015, MassDEP personnel shall be provided immediate access to the plant site, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
	9. In accordance with Plan Approval No. 4B04015, if any nuisance condition(s) should be generated by the operation of this facility, immediate appropriate steps shall be taken to abate the nuisance condition(s).

Table 8 Key:

- | | |
|---|---|
| CFR = Code of Federal Regulations | DAQC = Division of Air Quality Control |
| dB(A) = decibels weighted for the “A” scale | EU = Emission Unit |
| hr = hour | kW = kilowatt |
| MMBtu = Million British Thermal Units | No. = Number |
| ° = degrees | UTM = Universal Transverse Mercator |
| ' = minutes | § = Section |
| “ = seconds | §§ = Sections |
| °F = degrees Fahrenheit | USEPA = United States Environmental Protection Agency |
| @ = at | CMR = Code of Massachusetts Regulations |
| equiv. = equivalent | max. = maximum |

6. ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit application.

7. EMISSIONS TRADING

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the Facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Air Compliance Clerk, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the Facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

- A. This Facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:
 - 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
 - 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
 - 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.70, 7.71, 7.72, 7.74, 7.75 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this Facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the Facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. DUTY TO SUPPLEMENT

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the Facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. Enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the Facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based¹ emission limitations specified in this Permit as a result of an emergency². In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted Facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Air and Waste the following deviations from permit requirements, by telephone, by fax or by electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.

¹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

² An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- B. Exceedances of parameter limits established by this Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, this Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by this Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Air and Waste Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Air and Waste within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the Facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen (15) days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the Facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- A. Administrative Amendments - The Permittee may make changes at the Facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications - The Permittee may make changes at the Facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

- C. Significant Modifications - The Permittee may make changes at the Facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this Facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
 - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
 - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
 - 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
 - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
 - 5) Persons owning commercial or industrial process refrigeration equipment must comply with the

leak repair equipment requirements of 40 CFR 82.156.

- 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
 - D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
 - E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this Facility and the United States Environmental Protection Agency enforces these requirements.

This Facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the Facility must continue to comply with all existing federal and state applicable requirements to which the Facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the Facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.