Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
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June 21, 2016

Ms. Carly Filler
Hadley AD 1, LLC
20 Walnut Street, Suite 308
Wellesley, MA 02481

RE: HADLEY
Transmittal No.: X269387
Application No.: WE-16-008
Class: *SM-25*
FMF No.: 521599
AIR QUALITY PLAN APPROVAL

Dear Ms. Filler:

The Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Prevention, has reviewed your Non-major Comprehensive Plan Application (Application) listed above. This Application proposes the installation and operation of a second combined heat and power (CHP) engine/generator set at your existing anaerobic digestion facility located at Barstow's Longview Farm, 14 Barstow Lane in Hadley, Massachusetts (Facility). The application also proposed to add an oxidation catalyst and additional sound mitigation to the existing CHP engine (EU1), approved through Plan Approval NE-13-024 (December 22, 2015). The Application bears the seal and signature of Michael T. Lannan, Massachusetts Registered Professional Engineer number 45607.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below. **This Plan Approval supersedes the one (1) previous Plan Approval #NE-13-024 (December 22, 2015) as a determination of Best Available Control Technology (BACT) was reestablished for the existing emission units.**

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (Permittee) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

Barstow's Longview Farm is located in Hadley, Massachusetts and produces raw milk for wholesale distribution to cooperative processing facilities. The farm has approximately 250 cows. The farm also includes 400 acres of land for crops.

The Facility combines the in-house cow manure with leftover food and other Source Separated Organic (SSO) materials generated to produce biogas. The digestion system accepts up to 100 wet tons of SSO materials per day and 25 tons per day of in-house cow manure. The facility obtained a MassDEP Final Permit Approval for Recycling, Composting or Conversion (RCC) Operation dated April 11, 2016 to receive a maximum 45,625 tons of liquid and solid SSO per year combined.

To date, Hadley AD 1, LLC (the Permittee) has installed an anaerobic digestion/biogas-to-energy system, which consists of a 300 kilowatt (kW) biogas-fired combined heat and power engine/generator set, a back-up enclosed flare, and an anaerobic digestion system at Barstow's Longview Farm. The biogas is expected to be about 60% methane by volume and have a heating value of approximately 607 British thermal units per standard cubic foot (Btu/scf). The biogas is used to produce electricity and heat via the 300 kW lean burn engine. The heat is used by the Facility and to heat nearby residences. The electricity is used by the Facility and the farm, as well as supplied to the electric grid. Through optimization, the manure and SSO organic blend can create more biogas than originally anticipated, so an additional 500 kW engine has been proposed.

As proposed, the anaerobic digestion/biogas-to-energy system will include the following emission units (EUs): two (2) cow manure tanks, three (3) SSO feedstock tanks, a glycerin feedstock tank, a digester tank, an effluent tank, three (3) liquid fertilizer storage tanks, two (2) lean burn engine/generator sets, a back-up enclosed flare, and a supervisory control and data acquisition (SCADA) system.

SCADA System

The Supervisory Control and Data Acquisition (SCADA) system monitors process control parameters such as digester temperature, digester gas biogas pressure, mixer on/off, pumps, control of heating zones in heat exchanger, and output generation from the engine/generator set. It will be capable of controlling all system functions by operators that can remotely access the SCADA system via the internet. The SCADA system as well as the process tanks, effluent management system, and biogas processing equipment (i.e., engine, enclosed flare) will be serviced by local technicians in the area.

Cow Manure and Feedstock Tanks

Liquid SSO derived feedstock is delivered to the site in up to 9,000-gallon tanker trucks. The SSO is gravity fed into the Feedstock Tanks. The facility originally had two liquid feedstock tanks designated as EU4 and EU4A. Two additional feedstock tanks will be added:

- EU4B will receive offsite solids SSO and will be adjacent and share the same air headspace as the manure collection tank from the heifer barn (EU3A). EU3A receives about 1,000 gallons per day of manure from the 90 cows housed in the adjacent heifer barn;
- EU4C is a waste glycerin receiving tank. Expected glycerin through-put is 10,000 gallons per week. Glycerin will serve as a high-strength feedstock to the anaerobic digester. The waste glycerin will typically contain approximately 7% methanol. Tank loading losses of methanol was determined to be insignificant.

EU4 and EU4A are rectangular insulated, cast in place concrete tanks. Both have an operating depth of 10 feet. A prop mixer is utilized in each tank to prevent the stratification of material. Both EU4 and EU4A have a gas-tight wooden roof. These two feedstock tanks can provide a hydraulic storage buffer of up to 7 days of capacity for the digester tank.

The potential for odor exists when EU4 and EU4A are being filled. This is primarily due to the presence of hydrogen sulfide (H_2S) gas in the headspace which is displaced during tank filling. Displaced gases in EU4 and EU4A currently pass through a pollution control device (PCD) which consists of two activated carbon drums in series (PCD1). Sample ports exist at the inlet and outlet of the carbon drums. The inlet and outlet of the first drum will be monitored weekly and when the outlet H_2S concentration approaches the inlet concentration, the two drums will be switched. A new activated carbon drum will replace the second drum.

EU4B will have a closed lid with two operable receiving hatches, one for food waste (or "solids") reception and one for heifer manure. "Solids" include solid and semi-solid source separated organics materials from groceries, restaurants, food processors and producers. The hatches can be operated by the delivery driver or farmer through controls at the tank, or by the operator remotely through the SCADA system. The solids tank will contain a chopper pump and mixer and will also receive liquid digestate as necessary to maintain a pump-able mix.

EU4B will also be controlled for odor using a biofilter which is expected to reduce odors by approximately 90% when maintained as designed. A heavy duty blower routed to a biofilter (PCD4) will be used to create negative air pressure in the headspace of the tanks. PCD4 will be a custom 8 yard capacity metal biofilter container with a steel cover. The air will be dispersed throughout the filter using perforated PVC piping, or an air-distribution grid. The biofilter will be filled with 1.5 cubic yards of media material, composed of 50% peat moss, 50% wood chips with a bed depth of 18 inches.

The biofilter is designed for a minimum empty bed contact time of 10 seconds while the hatch is open, sufficient for adequate removal of odors from covered manure storage units[1]. When delivering a load, the driver or operator will activate manual or remote controls to ramp the flow rate of the blower up to approximately 300 cubic feet per minute (cfm). The fan will run for five (5) minutes before the hatch is opened. Once the load has been added, the driver and/or operator will again activate manual or remote controls to close the lid. The blower will continue at high speed for five (5) minutes after the hatch is closed. Thereafter, the blower will be operated at a lower rate of approximately 100 cfm. The hatch will be opened approximately three times per day for 5 minutes or less each time during solid SSO delivery.

The biofilter will be fitted with a pressure transducer and a moisture sensor. The media compacts over time and has the potential to clog, causing the differential pressure across the media to rise. The biofilter media will be manually irrigated using a hose. A fully automated irrigation system may be installed in the future. Both the moisture sensor and the differential pressure sensor will initiate a notification to the operator via a mobile device if a reading is out of a set range. The acceptable pressure and moisture ranges will be established in the facility's Standard Operation and Maintenance Procedure (SOMP). The operator will monitor and record the differential pressure and moisture level weekly, either manually or via the mobile device, to determine the need for media amendment or replacement. The operator will also perform a weekly "sniff test" to check for possible channeling of biogas through the biofilter media.

Biofilter media will be replaced when pressure drop increases are reducing the ventilation rate. Typically this occurs every 2-5 years. Spent material will be disposed of appropriately. Operators will keep a log of media replacement.

Digester Tank

EU5 is an insulated, cast in place concrete tank with a working volume of 525,000 gallons. The operating depth for the tank is 14 feet. Three (3) prop mixers prevent stratification of any material inside EU5, ensuring a consistent mix. The conditioned biomass from EU3, EU3A, EU4, EU4A, and EU4B will be fed into EU5. The material in EU5 is heated using waste heat from the CHP engine to maintain an ideal temperature of approximately 100 degrees Fahrenheit (^{o}F). Waste heat is used to preheat the contents of the glycerin tank and SSO feedstock tanks as well.

Biogas storage in EU5 occurs within the single membrane roof system that inflates and deflates according to the amount of biogas in the system. Biogas will be vented to the enclosed flare under certain conditions (see "Existing Back-up Enclosed Flare" below). Safe pressure levels are maintained by a water trap mounted to EU5 that allows gas to release to atmosphere if the

[1] Schmidt, D; Jacobson, L; Nicolai, R. "Biofilter Design Information." *Manure Management and Air Quality.* University of Minnesota Extension, published March 2004, accessed May 17, 2016. http://www.extension.umn.edu/agriculture/manure-management-and-air-quality/air-quality/biofilter-design-information/.

digester pressure is greater than 1.1 inches water column or 0.08" of negative pressure. This would be considered an emergency condition.

Hydrogen sulfide concentrations in the biogas leading to the CHP engines and flare are limited to 200 parts per million as a daily average which limits the emissions of sulfur dioxide (SO_2) as a product of combustion. Two biological scrubbing vessels (PCD2) and one iron sponge system (PCD3), in series, provide H_2S control.

PCD2 contains aerobic sulfur oxidation bacteria which grow on plastic packing material. Biogas is conveyed through the vessels to oxidize H_2S into elementary sulfur and sulfuric acid. Wash down water is continuously re-circulated through the biological scrubbers to knock off accumulated precipitated sulfur from the packing material. The wash down water is replaced every 2 months, and discharged to one of the two slurrystore tanks along with digestate. The surface of the scrubber media will be flushed with water every two years to remove sulfur that has built up.

After the biological scrubbers, the biogas passes through PCD3 to further remove H_2S. In the iron sponge scrubber, H_2S binds with ferric oxide in the media removing it from the biogas stream. The H_2S level is monitored continuously at the outlet to PCD3 and results are received by the SCADA system. If the SCADA system malfunctions, daily H_2S samples will be taken using a sorbent tube and analyzed. The iron sponge media will be completely replaced every three to five years, or as necessary.

When the H_2S level is observed to be consistently rising, the inlet and outlet H_2S concentrations of each biological scrubber and the iron sponge scrubber will be monitored to determine the removal efficiency of each PCD.

Digestate Management System

Liquid effluent from EU5 flows by gravity over a weir into the 20,000-gallon Effluent Tank (EU6) for short term storage of 1 – 2 days. From EU6, effluent is pumped periodically into one of two 1,000,000-gallon Liquid Fertilizer Storage Tanks (EU6 and EU6A). The liquid fertilizer is land applied. Solid digestate is re-used as bedding material in the dairy barn. An additional 1,000,000 gallon Liquid Fertilizer Storage Tank (EU6B) will be added to store effluent.

Existing EU1 Lean Burn Engine

The Guascor Model # SFGLD 240 engine (EU1), has a maximum heat input capacity of 3.02 million British thermal units per hour (MMBtu/hr). EU1 is capable of combusting up to 84 standard cubic feet per minute (scfm) of digester gas at 100% load, though it will usually operate at less than 100% capacity. It is equipped with a 9-inch diameter vertical exhaust stack. The opening of this vertical stack is situated 21 feet above the engine enclosure and 35 feet above ground level. The exhaust gas exit velocity from EU1 will be approximately 49 feet per second at a stack gas temperature of approximately 290 degrees Fahrenheit (^{o}F).

This existing engine will be retrofitted with a DCL America, Inc. carbon monoxide catalyst model DC18-8 CC to reduce carbon monoxide emissions by 95% and reduce formaldehyde emissions by 85%. Catalyst blinding may be caused by the presence of siloxanes in the biogas. The catalyst will be checked for efficiency on a quarterly basis using an E Instruments model E1500 (or equivalent) hand-held combustion gas analyzer. In addition, the backpressure across the engine system will be monitored daily. If elevated pressures are traced back to the catalyst, the catalyst will be checked for control efficiency and will be replaced as necessary.

New EU8 Lean Burn Engine

The new Guascor Model No. SFGLD 360 1200 RPM engine (EU8), has a maximum heat input capacity of 4.32 MMBtu/hr. EU8 is capable of combusting up to 119 standard cubic feet per minute (scfm) of digester gas at 100% load, though it will usually operate at less than 100% capacity. It will be equipped with a 9-inch diameter vertical exhaust stack. The opening of this vertical stack is situated 31 feet above the engine enclosure and 42 feet above ground level. The exhaust gas exit velocity from EU8 will be approximately 73 feet per second at a stack gas temperature of approximately 268 degrees Fahrenheit (^{o}F).

This engine will include a DCL America, Inc. carbon monoxide catalyst model DC64-10 CC to reduce carbon monoxide emissions by 95% and reduce formaldehyde emissions by 85%. The catalyst will be checked for efficiency in the same manner as the existing engine (EU1) and will be replaced as necessary.

Existing Back-up Enclosed Flare

The biogas flare will be used during start-up, down-time, and maintenance of the engine. It will also be used to reduce digester pressure in the event that the engines are insufficient and biogas cannot be temporarily stored in the digester membrane. The pressure within the anaerobic digester will be monitored and at specific set points (to be determined) the flare blower will start and the flare will ignite. Biogas will ideally be routed to the engines, so it is expected that the flare will be used for no more than 876 hours per year.

The back-up enclosed flare (EU2) has a maximum heat input capacity of 7.3 MMBtu/hr with a turndown ration of 10:1. EU2 is capable of combusting up to 200 scfm of digester gas, which is the expected maximum rate of biogas production. EU2 is equipped with a 30-inch diameter vertical exhaust, the top of which is situated 20 feet above ground level. The exhaust gas exit velocity from the flare will range from 7 to 68 feet per second at a stack gas temperature of approximately 1,200 ^{o}F.

A thermocouple will continuously monitor the presence of a flame when biogas is routed to it. Data will be sent to the SCADA system and an alarm will alert the operator if a flame is not detected.

Air Dispersion Modeling

This section documents the results from an ambient air quality dispersion modeling analysis for the Barstow anaerobic digester (AD) biogas-to-energy combustion equipment to demonstrate that the predicted air quality impacts will comply with the Massachusetts and National Ambient Air Quality Standards (NAAQS) and Massachusetts Ambient Air Toxic Guidelines 24-hr Threshold Effects Exposure Limit (TEL) and the annual Ambient Air Limit (AAL) for formaldehyde. The air quality analysis was reviewed by MassDEP.

The air quality impact analysis was based on the new 500 kW CHP engine, existing 300 kW CHP engine, and back-up flare operating simultaneously at 100% of their load. This is a conservative operational scenario as the flare will typically be employed only when no engines or one engine is operating. The dispersion model predicted maximum concentrations of CO, NO_2, $PM_{2.5}$, PM_{10} and SO_2, along with formaldehyde, in the area surrounding the farm. These predicted concentrations, except for formaldehyde, were then added to representative background concentrations and compared to the NAAQS. Model-predicted concentrations of formaldehyde are compared directly to the TEL/AAL.

No nearby facilities with significant emissions of criteria pollutants are located in the area directly surrounding the farm in Hadley, so it was not necessary in include any off-site sources in the modeling analysis.

Type of Model

The air quality modeling analysis was performed with the latest version (15181) of the United States Environmental Protection Agency (USEPA) AERMOD dispersion model with USEPA's recommended regulatory default options and rural dispersion coefficients. The modeling was run using a meteorological data-set derived from utilizing AERMET (14134) with default options. Terrain elevations for receptors and structures were obtained from the USGS National Elevation Dataset (NED) and processed using the AERMAP (11103) preprocessor.

Modeling Results

The following table presents the modeling results submitted in support of the Plan Approval Application. These results are fully compliant with the criteria pollutant NAAQS and formaldehyde TEL/AAL. Except where noted, the total impact represents the combined maximum model-predicted concentrations from the two engines and flare at the Barstow Farm plus background levels.

Air Dispersion Modeling Results – Barstow's Longview Farm					
Pollutant	**Averaging Period**	**Max Model Predicted** ($\mu g/m^3$)	**Background Concentration** ($\mu g/m^3$)	**Total Impact** ($\mu g/m^3$)	**NAAQS TEL/AAL** ($\mu g/m^3$)
NO_2	1-hr	51.1	72.1	123.2	188
	Annual	1.8	13.4	15.2	100
SO_2	1-hr	109.6	27.6	137.2	196
PM_{10}	24-hr	1.9	29.0	30.9	150
$PM_{2.5}$	24-hr	1.9	16.9	18.8	35
	Annual	0.3	6.6	6.9	12
CO	1-hr	109.7	1225.2	1335	40,000
	8-hr	25.5	916.0	942	10,000
Formaldehyde	24-hr	0.46	--	0.46	2.0
	Annual	0.0799	--	0.0799	0.08

Note: Total impact equals modeled-predicted concentrations plus measured background concentrations, except for formaldehyde.

This demonstrates that the Barstow anaerobic AD biogas-to-energy combustion equipment will neither cause nor contribute to a condition of air pollution with respect to its criteria pollutant and formaldehyde emissions.

Conclusion

The inputs and results of the Barstow modeling analysis were reviewed and cross-checked by MassDEP and determined to be accurate with respect to the data supporting the air permit application. Furthermore, the modeling analysis is representative of the facility in its proposed configuration and setting. MassDEP concludes that the results summarized in the AERMOD analysis indicate that all pollutants for all averaging periods modeled demonstrate compliance with NAAQS. In addition, compliance with the formaldehyde TEL/AALs was also demonstrated.

Sound Monitoring and Modeling Study

A sound monitoring and modeling study was conducted to predict compliance with the MassDEP noise policy. All incremental changes in existing sound levels were found to be below the 10-dBA incremental limit allowed by the MassDEP noise policy at all offsite receptors. In addition, the results of the modeling analysis indicate that the facility would generate no "pure tones" as defined in the MassDEP noise policy.

The existing engine (EU1) will remain in its current enclosure (telephone correspondence between MassDEP and the Permittee on April 15, 2016). The engine will be retrofitted with a Super Extreme Grade Silencer manufactured by GT Exhaust (or equivalent) to reduce exhaust sound levels. The current engine housing will include acoustically-treated inlet and outlet exhaust louvers.

The new CHP engine (EU8) will be delivered in a prefabricated acoustically-treated enclosure which will have acoustically-treated inlet and outlet exhaust louvers. The engine will have a Super Extreme Grade Silencer manufactured by GT Exhaust (or equivalent) to reduce exhaust sound levels.

To verify that these noise mitigation measures are effective, the Permittee will conduct a noise survey in accordance with MassDEP guidelines following construction and during operation of the facility.

Best Available Control Technology

The new anaerobic digester system, CHP generator sets, and associated gas back-up flare will operate in accordance with MassDEP guidance entitled *Top Case Best Available Control Technology (BACT) Guidance for air emissions from digester-gas-to-electricity operations at Massachusetts farms* (dated February 24, 2016) as reflected in Table 2, Operational, Production, and Emission Limitations. The emission limits will be achieved through use of the bioscrubbers/iron sponge for hydrogen sulfide control (PCD2 and PCD4) and catalytic oxidizers on each engine for carbon monoxide and formaldehyde control.

Estimated missions from EU1, EU2, and EU8 are tabulated as follows:

Estimated Emissions (tons per year)				
Pollutant	**EU1 Existing Engine (8,760 hrs/yr)**	**EU2 Existing Flare (876 hrs/yr)**	**EU8 New Engine (8,760 hrs/yr)**	**Total**
nitrogen oxides (NOx)	2.6	0.2	3.9	6.7
carbon monoxide (CO)	0.56	5.7	0.81	7.1
volatile organic compounds (VOC)	TBD	0.45	TBD	TBD
particulate matter (PM)	TBD	TBD	TBD	TBD
sulfur dioxide (SO_2)	0.74	0.18	1.1	2.0
HAP_{single} (formaldehyde)	0.1	-	0.2	0.3
carbon dioxide (CO_2)	3,170	598	4,530	8,300

Table Key:
EU# = Emission Unit Number
HAP_{single} = single hazardous air pollutant
TBD = to be determined through engine and flare emission testing. The greatest emission rate of three (3) averaged runs will be selected and scaled up. The newly determined emission limit will be added to a revised plan approval and will account for variations in biogas heat content and will provide general operational flexibility.

Table Notes: none.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1

EU#	Description	Design Capacity	Pollution Control Device (PCD)
EU1	Guascor Model No. SFGLD-240 1,200 RPM engine	3.02 MMBtu/hr 300 kW max output	Fuel Injection modification; Turbo charging; DCL America, Inc. carbon monoxide catalyst model **DC18-8 CC** (or equivalent) for CO and CH_2O control
EU2	Back-up enclosed flare	7.3 MMBtu/hr	None
EU3	Cow Manure Tank	10,000 gallons	None
EU3A	Heifer Manure Tank	1,000 gallons	None
EU4	SSO Feedstock Tank	50,000 gallons	Two (2) 55-gallon Activated Carbon Drums in series (PCD1) for odor control
EU4A	SSO Feedstock Tank	18,000 gallons	
EU4B	SSO Feedstock Tank	18,000 gallons	Packaged 8 cubic yard biofilter with 1.5 cubic yards of media for odor control
EU4C	Glycerin Feedstock Tank	10,000 gallons	None
EU5	Digester Tank	575,000 gallons	Biological Scrubbers H_2S control (PCD2); Iron Sponge H_2S Control System (PCD3)
EU6	Effluent Transfer Tank	20,000 gallons	None
EU7 EU7A EU7B	Three Liquid Fertilizer Storage Tanks	1,000,000 gallons each	None
EU8	Guascor Model No. SFGLD-360 1,200 RPM engine	4.32 MMBtu/hr 500 kW max output	Lean burn engine for NO_x control; DCL America, Inc. carbon monoxide catalyst model **DC64-10 CC** (or equivalent) for CO and CH_2O control

Table 1 Key:

EU# = Emission Unit Number
PCD = Pollution Control Device
MMBtu/hr = million British Thermal Units per hour
RPM = revolutions per minute
kW = kilowatts
max = maximum
H_2S = hydrogen sulfide

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2

EU#	Operational / Production Limit	Air Contaminant	Emission Limit
EU1[a, b]	Daily average of H_2S at the inlet of EU1 shall be less than or equal to 200 ppmv [b] 95% carbon monoxide control efficiency using an oxidation catalyst 85% formaldehyde (single HAP) control efficiency using an oxidation catalyst	NO_x	0.6 g/bhp-hr
		CO	0.13 g/bhp-hr
		VOC[c]	TBD g/bhp-hr
		$PM/PM_{10}/PM_{2.5}$	TBD g/bhp-hr
		SO_2	0.17 g/bhp-hr
		HAP_{single} (formaldehyde)	0.024 g/bhp-hr
		Opacity	<5%, EXCEPT 5 TO <10% FOR ≤2 MINUTES DURING ANY ONE HOUR
		Smoke	310 CMR 7.06(1)(a)
EU2[b]	Maximum operation of 876 hours per twelve month consecutive period Daily average of H_2S at the inlet of EU2 shall be less than or equal to 200 ppmv [b]	NO_x	0.53 lb/hr 0.07 TPM 0.22 TPY
		CO	13.0 lbs/hr 1.2 TPM 5.7 TPY
		VOC	1.0 lb/hr 0.15 TPM 0.45 TPY
		$PM/PM_{10}/PM_{2.5}$	TBD lb/hr 0.01 TPM 0.03 TPY
		SO_2	0.4 lb/hr 0.06 TPM 0.18 TPY
		Opacity	<5%, EXCEPT 5 TO <10% FOR ≤2 MINUTES DURING ANY ONE HOUR
		Smoke	310 CMR 7.06(1)(a)

Table 2			
EU#	**Operational / Production Limit**	**Air Contaminant**	**Emission Limit**
EU8[a, b]	Daily average of H_2S at the inlet of EU8 shall be less than or equal to 200 ppmv [b] 95% carbon monoxide control efficiency using an oxidation catalyst 85% formaldehyde (single HAP) control efficiency using an oxidation catalyst	NO_x	0.6 g/bhp-hr
		CO	0.13 g/bhp-hr
		VOC[c]	TBD g/bhp-hr
		$PM/PM_{10}/PM_{2.5}$	TBD g/bhp-hr
		SO_2	0.16 g/bhp-hr
		HAP_{single} (formaldehyde)	0.024 g/bhp-hr
		Opacity	<5%, EXCEPT 5 TO <10% FOR ≤2 MINUTES DURING ANY ONE HOUR
		Smoke	310 CMR 7.06(1)(a)

Table 2 Key:

NA = Not Applicable
EU# = Emission Unit Number
NO_x = Nitrogen Oxides
CO = Carbon Monoxide
SO_2 = Sulfur Dioxide
% = percent
< = less than
≤ = less than or equal to
H_2S = Hydrogen Sulfide
CO_2 = Carbon Dioxide
g/bhp-hr = grams per brake-horse-power hour
lbs/hr = pounds per hour
TPM = tons per month
TPY = tons per consecutive12-month period
VOC = Volatile Organic Compounds
ppmv = parts per million by volume
HAP (single) = single Hazardous Air Pollutant (formaldehyde)
CMR = Code of Massachusetts Regulations
lb/MMBtu = pounds per million British thermal units
PM = Total Particulate Matter, including filterable PM and condensable PM
PM_{10} = Particulate Matter less than or equal to 10 microns in diameter
$PM_{2.5}$ = Particulate Matter less than or equal to 2.5 microns in diameter
TBD = to be determined through engine and flare emission testing. The greatest emission rate of three (3) averaged runs will be selected and scaled up. The newly determined emission limit will be added to a revised plan approval and will account for variations in biogas heat content and will provide general operational flexibility.

Table 2 Notes:

a) These emission limitations shall apply to all engine/generator loads. Compliance with these emission limitations shall be determined based on one-hour averages. Emission limits are based upon biogas containing 607 British thermal units per standard cubic foot.
b) SO_2 emissions are conservatively based upon complete oxidation of the inlet H_2S concentrations.
c) Emissions of formaldehyde shall not be included when calculating emissions of VOC.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3

EU#	Monitoring and Testing Requirements
EU1 EU8	1. The Permittee shall conduct emissions testing for NO_x, CO, VOC, total PM, SO_2, and formaldehyde within 90 days of the commencement of continuous operation of EU8. All compliance testing shall be conducted using the test methods and procedures detailed in 40 CFR §60.4244 and 40 CFR Part 60 Appendix A. All compliance testing shall be scheduled with MassDEP personnel at a mutually agreeable date and time. The Permittee shall submit a test protocol for the required emission test for review and MassDEP approval at least 30 days prior to the anticipated date of testing.
	2. In accordance with 310 CMR 7.13 and 40 CFR 60.4243(b)(2)(ii), the Permittee shall conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.
	3. For compliance testing purposes, EU1 and EU8 shall be constructed to accommodate the emissions testing requirements described in 40 CFR§60.4244 and 40 CFR Part 60, Appendix A. The sampling ports should ideally be located at two duct diameters upstream and eight duct diameters downstream of any flow disturbance. The corresponding sampling ports should be 90 degrees apart from each other.
	4. The Permittee, to document actual emissions of the air contaminants listed in Table 2 above, shall monitor, for each engine, the daily, monthly, and twelve month rolling: a. engine run time in hours; and b. biogas consumption (scfm).
	5. The Permittee shall monitor the backpressure of the engine system daily and if there is an elevated backpressure traced to either catalytic oxidizer, the Permittee will determine if catalyst wash or replacement is neccessary.
EU1	6. The Permittee shall install test ports at the inlet and outlet of the DC18 -8 CC (or equivalent) catalytic oxidizer to accommodate an E Instruments model E1500 (or equivalent) handheld combustion gas analyzer.
	7. The Permittee shall test the DC18 -8 CC (or equivalent) catalytic oxidizer efficiency using a properly calibrated E Instruments model E1500 (or equivalent) handheld combustion gas analyzer on a quarterly basis.
EU8	8. The Permittee shall install test ports at the inlet and outlet of the DC64-10 CC (or equivalent) catalytic oxidizer to accommodate an E Instruments model E1500 (or equivalent) handheld combustion gas analyzer.
	9. The Permittee shall test the DC64-10 CC (or equivalent) catalytic oxidizer efficiency using a properly calibrated E Instruments model E1500 (or equivalent) handheld combustion gas analyzer on a quarterly basis.
EU1 EU2 EU8	10. If and when MassDEP requires it, the Permittee shall conduct opacity (40 CFR 60 Appendix A, Method 9) and/or smoke observations (40 CFR 60 Appendix A, Method 22) to determine compliance with the visible emission limits stated in Table 2.

Table 3	
EU#	**Monitoring and Testing Requirements**
EU1 EU2 EU8	11. To document compliance with the emission limitations contained in Table 2 above, the Permittee shall monitor the biogas at the outlet of PCD3 using a data logger connected to a SCADA system. The following shall be continuously monitored and averaged over an hourly block basis: a. Methane content (%); b. The maximum, minimum, and average H_2S concentrations (in ppm by volume); c. Temperature of the gas stream.
	12. In the event that the H_2S analyzers are offline, the Permittee shall monitor the H_2S concentration (ppm by volume) at the outlet of PCD3 using a sorbent tube on a daily basis.
EU2	13. The Permittee shall conduct emissions testing of the enclosed flare for total PM within 90 days of the commencement of continuous operation of EU8. All compliance testing shall be conducted using the test methods and procedures detailed in 40 CFR Part 60 Appendix A. All compliance testing shall be witnessed by MassDEP personnel at a mutually agreeable date and time. The Permittee shall submit a test protocol for the required emission test for review and MassDEP approval at least 30 days prior to the anticipated date of testing.
	14. The Permittee, to document actual emissions of the air contaminants listed in Table 2 above, shall monitor the daily, monthly, and twelve month rolling: a. Flare run time in hours; and b. Flare biogas consumption (scf).
	15. The Permittee shall continuously monitor the presence of the flare pilot flame using a thermocouple or any other device approved by the MassDEP. The monitor shall be connected to the SCADA system and include an audible alarm to alert the operator of the absence of a flame while biogas is routed to the back-up flare.
EU4 EU4A	16. The Permittee shall install sampling ports at the inlet and outlet of each activated carbon drum of PCD1.
	17. The Permittee personnel shall be trained in the proper operation of the activated carbon drum system (PCD1) for EU4 and EU4A.
	18. The Permittee shall monitor the inlet and outlet H_2S concentration of the first drum in the series on a weekly basis using a sorbent tube. When the outlet H_2S concentration approaches the inlet H_2S concentration, the Permittee shall immediately install a new activated carbon drum in the second drum position of the PCD1 system and replace the first drum with the second drum that was in series.
EU4 EU4A EU4B	19. The Permittee shall monitor daily the amount of SSO that EU4 and EU4A and EU4B receives.
EU3A EU4B	20. The Permittee shall install the following instrumentation on the biofilter to monitor for effectiveness: a. A moisture sensor; and b. Pressure transducers to measure the pressure drop across the biofilter media.
	21. The Permittee shall monitor the following biofilter parameters on a weekly basis: a. Moisture level of the biofilter media including confirmation that the biofilter media is uniformly wetted; b. Pressure drop across the biofilter media; and c. The presence of odor by a “sniff test.”

Table 3	
EU#	**Monitoring and Testing Requirements**
Facility-wide	22. The Permittee shall conduct a sound survey during nighttime operation in accordance with MassDEP guidelines, to demonstrate that the sound impacts from the operation of the EUs are in compliance with Regulation 310 CMR 7.10 and the Bureau of Waste Prevention's Noise Policy No. 90-001 (copy attached). The Permittee shall provide a sound survey protocol for MassDEP review and approval at least 30 days prior to the anticipated date of testing. The survey shall be conducted within 45 days of the commencement of continuous operation of these EU1 and EU8.
	23. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	24. The Permittee shall conduct additional emissions testing on the subject units if and when MassDEP deems it necessary as per 310 CMR 7.13 – Stack Testing. All emissions testing shall be performed in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.

Table 3 Key:
EU# = Emission Unit Number
SSO = source separated organics (i.e. food waste)
O_2 = oxygen
ppm = parts per million
CMR= Code of Massachusetts Regulations
% = percent

Table 4	
EU#	**Record Keeping Requirements**
EU1 EU8	1. The Permittee, to document actual emissions of the air contaminants listed in Table 2 above, shall record, for each engine, the daily, monthly, and twelve month rolling: a. engine run time in hours; and b. biogas consumption (scf).
	2. The Permittee shall, on a quarterly basis, record the measured control efficiency of each catalytic oxidizer.
	3. The Permittee shall keep daily records of the backpressure across the engine system (per Table 3, Provision 5) and maintain records of data obtained from the efficiency testing of each catalytic oxidizer using the E Instruments model E1500 (or equivalent) handheld combustion gas analyzer.
	4. The Permittee shall keep records of any catalytic oxidizer replacement including but not limited to the date of replacement.
EU1 EU2 EU8	5. At the outlet of PCD3, using the SCADA system, the Permittee shall maintain hourly on-site records of: a. methane content of the biogas; b. the maximum and average one hour hydrogen sulfide concentration (in ppm by volume); c. temperature of the gas stream.
	6. The Permittee shall maintain a record keeping system to be established on-site to include compliance records sufficient to document the actual monthly and twelve month rolling emission rates of NO_x, CO, VOC, total PM, SO_2, H_2S, CO_2, and HAP (formaldehyde) so as to determine compliance status with the emission limitations contained in Table 2 above.
	7. The Permittee shall, in the event that the SCADA system malfunctions, keep a daily log of the H_2S content of the gas exiting PCD3 using a sorbent tube.
EU2	8. The Permittee shall record the daily, monthly, and twelve month rolling: a. flare run time in hours; b. biogas consumption; c. temperature of the flare while in operation; d. presence of the flare pilot flame; and e. any instances of alarm due to the absence of the flare pilot flame.
EU1 EU2 EU4 EU4A EU4B EU5 EU8	9. The Permittee shall maintain a record keeping system for these EUs to be established on-site. Recordkeeping shall, at a minimum, include: a. Maintenance: A record of routine maintenance activities performed on these EUs and their monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed. b. Malfunctions: A record of all malfunctions of these EUs, their monitoring equipment, and the SCADA system including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the equipment was returned to compliance.

Table 4	
EU#	**Record Keeping Requirements**
EU4 EU4A EU4B	10. The Permittee shall maintain onsite records of the daily amount of SSO received.
EU4 EU4A	11. The Permittee shall maintain onsite records including: a. weekly records of the H_2S sorbent tube testing of PCD1; and b. date and time activated carbon drums were replaced.
EU3A EU4B	12. The Permittee shall record the following biofilter parameters on a weekly basis: a. Moisture level of the biofilter media including confirmation that the biofilter media is uniformly wetted; b. Pressure drop across the biofilter media; c. The presence of odor by a "sniff test;" and d. Any action taken to remediate the biofilter.
EU4C	13. The Permittee shall record the throughput of glycerin on a monthly and 12 consecutive month basis.
Facility-wide	14. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .
	15. The Permittee shall quantify and record all periods of excess emissions, even if attributable to an emergency/malfunction, startup/shutdown or equipment cleaning in the determination of annual emissions and compliance with the emission limits as stated in Table 2.
	16. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	17. The Permittee shall maintain a copy of all sound survey results on-site.
	18. The Permittee shall keep a log of any noise and/or odor complaints received by the facility documenting the date/time, name/contact information of the person making the complaint (if given), nature of the complaint, possible cause, and resolution.
	19. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EUs and PCDs approved herein on-site.
	20. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	21. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.
	22. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.

Table 4 Key:
EU# = Emission Unit Number
PCDs = Pollution Control Devices
SOMP = Standard Operating and Maintenance Procedure
USEPA = United States Environmental Protection Agency
% = percent

Table 5	
EU#	**Reporting Requirements**
EU1 EU2 EU8	1. The Permittee shall submit a compliance test protocol to MassDEP's Western Regional Office (WERO) for review and approval at least 30 days prior to the scheduled commencement of said testing.
	2. The Permittee shall submit any emission test report to WERO for review within 60 days of the completion of any required compliance stack testing.
	3. The Permittee shall submit the Final SOMP and any subsequent changes for these EUs to WERO within 60 days of completion of their required initial compliance testing.
Facility-wide	4. The sound survey results shall be submitted to MassDEP's Western Regional Office (WERO), in writing, attention BAW Permit Chief, within 75 days of the commencement of continuous operation of these EUs.
	5. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	6. The Permittee shall notify MassDEP's WERO, BAW Permit Chief by telephone (413-784-1100), email, marc.simpson@state.ma.us , or fax (413-784-1149), as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	7. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's written request.
	8. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.

Table 5 Key:
EU# = Emission Unit Number
H_2S = hydrogen sulfide
BAW = Bureau of Air and Waste
SOMP = Standard Operating and Maintenance Procedure

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6

EU#	Special Terms and Conditions
EU1	1. The Permittee shall, within 30 days of the commencement of continuous operation of EU8, install on EU1 a DCL America, Inc. carbon monoxide catalyst model **DC18-8 CC** (or equivalent) capable of controlling carbon monoxide emissions by a minimum of 95% and formaldehyde emissions by a minimum of 85%. The oxidation catalyst shall operate at all times that EU1 is operating.
	2. The Permittee shall replace the **DC18-8 CC** (or equivalent) oxidation catalyst within 10 business days if, through Table 3 monitoring, the oxidation catalyst CO control efficiency drops below 85%.
	3. The Permittee shall, within 30 days of the commencement of continuous operation of EU8, upgrade the silencer on EU1 to a Super Extreme Grade Model #A201-7100 silencer manufactured by GT Exhaust (or equivalent).
	4. The Permittee shall insure that the building enclosure air inlet and exhaust are fitted with acoustic louvers.
EU2	5. The Permittee shall provide raptor protection at the enclosed flare exit.
EU8	6. The Permittee shall install on EU8 a DCL America, Inc. carbon monoxide catalyst model **DC64-10 CC** (or equivalent) capable of controlling carbon monoxide emissions by a minimum of 95% and formaldehyde emissions by a minimum of 85%. The oxidation catalyst shall operate at all times that EU8 is operating.
	7. The Permittee shall replace the **DC64-10 CC** (or equivalent) oxidation catalyst within 10 business days if, through Table 3 monitoring, the oxidation catalyst CO control efficiency drops below 85%.
	8. The Permittee shall install a Super Extreme Grade Model #A201-8100 silencer manufactured by GT Exhaust (or equivalent) upon installation of EU8.
	9. EU8 shall be housed in a prefabricated, acoustically-treated enclosure designed for sound mitigation. The Permittee shall insure that the building enclosure air inlet and exhaust are fitted with acoustic louvers.
EU1 EU8	10. The Permittee shall operate and maintain EU1 and EU8 to achieve the emission standards as required in Table 2 over the entire life of the engine.
	11. The Permittee shall maintain EU1 and EU8 in accordance with the manufacturer's recommendations and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Table 6	
EU#	**Special Terms and Conditions**
EU1 EU8	12. EU1 and EU8 shall be fired on digester (EU5) biogas exclusively.
	13. The Permittee shall operate the subject EUs consistent with the Final SOMP and the conditions/parameters established during the initial compliance test. The final SOMP shall include operating procedures for periods of start-up and shut-down.
	14. The Permittee shall, in the event that EU1 and/or EU8 is rebuilt or undergoes major repair or maintenance as defined in 40 CFR 94.11(a), conduct subsequent performance testing in accordance with 40 CFR 60.4244.
EU1 EU2 EU8	15. The Permittee shall install, properly operate and maintain PCD2 and PCD3 according to the SOMP developed by the Permittee for the purpose of maintaining the H_2S concentration below 200 parts per million by volume (ppmv) as a daily average prior to the combustion of the biogas in EU1, EU2, or EU8. The iron sponge media will be replaced when the discharge H2S concentration approaches 200 ppm or after two (2) years of media life, whichever occurs first.
EU4 EU4A	16. The Permittee shall install, properly operate and maintain PCD1 according to the SOMP developed by the Permittee for the purpose of controlling the outlet H_2S concentration. If the Permittee determines that the condition described in Table 3, Provision 17 is occurring on a consistent and predictable basis, the Permittee may submit this information and request that the weekly schedule of monitoring the first drum be adjusted with the approval of the Western Regional Office of the MassDEP.
	17. The Permittee personnel shall be trained in the proper operation of PCD1 during unloading operations. Records shall be kept that include, but are not limited to, the name of the person trained and the date of training.
EU3A EU4B	18. The Permittee shall install a biofilter (PCD4) to the custom specifications given during the application process to control odor from EU3A and EU4B. The Permittee may request changes to PCD4 and implement the changes with MassDEP approval.
	19. The Permittee shall install, properly operate and maintain PCD4 according to the SOMP developed by the Permittee for the purpose of controlling odors from EU3A and EU4B.
	20. The Permittee personnel shall be trained in the proper operation of the blower system during unloading operations and shall ensure that the blower fan is running at the design flow of the biofilter system at all times. Records shall be kept that include, but are not limited to, the name of the person trained and the date of training.
	21. The Permittee personnel shall keep the lid on each tank closed between unloading operations and shall minimize the time that the tanks lids are opened during unloading operations.
EU4C	22. The Permittee shall, for each delivery of glycerin feedstock, monitor the throughput of glycerin through EU4C.
Facility-wide	23. A full inventory of spare parts, as listed in the SOMP, for the entire anaerobic digestion facility shall be kept onsite or at an offsite location within two hours travel time of the facility.

Table 6	
EU#	**Special Terms and Conditions**
Facility-wide	24. The Permittee shall submit a SOMP for the activated carbon system (PCD1), the bioscrubbers (PCD2), the iron sponge hydrogen sulfide removal system (PCD3), and the biofilter (PCD4) to MassDEP's WERO, ATTN: BAW Permit Chief within sixty (60) days of startup of the Facility. This plan shall be implemented and followed immediately upon startup of the Facility and, at a minimum, include the following information: i. A description of each system, including the dimensions and location of each system, materials of construction and key operating parameter value(s) or range(s); ii. A description of how each system will be operated and maintained, including a schedule for routine maintenance and material replacement; iii. A description of required monitoring and corrective actions performed if any parameter falls outside the expected value or range; and iv. A description of any periodic sampling or testing to be performed.
	25. This Facility may be subject to the Federal New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines (40 CFR Part 60 Subpart JJJJ), including the NSPS General Provisions (Subpart A). Since MassDEP has not accepted delegation for Subpart JJJJ, you are advised to consult with the EPA for additional information. There may be additional notification, record keeping and reporting requirements. Their address is US EPA Region 1, 5 Post Office Square – Suite 100, Boston, MA 02109-3912.
	26. This Facility may be subject to the Federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (RICE) under 40 CFR Part 63 Subpart ZZZZ. This regulation includes stationary RICE units at an area source. Since MassDEP has not accepted delegation for Subpart ZZZZ, you are advised to consult with the United States Environmental Protection Agency (USEPA) for additional information. There may be additional notification, record keeping and reporting requirements. Their address is US EPA Region 1, 5 Post Office Square – Suite 100, Boston, MA 02109-3912.
	27. This Plan Approval #WE-16-008 supersedes the Conditional Approval #NE-13-019 issued to the Permittee on December 22, 2015 in its entirety.

Table 6 Key:
EU# = Emission Unit Number
O_2 = oxygen
% = percent
PCD2 = two biological scrubbers
PCD3 = iron sponge hydrogen sulfide (H_2S) removal system
BAW = Bureau of Air and Waste

B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as "shanty caps" and "egg beaters." The Permittee

shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7

EU#/PCD	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity (feet per second)	Stack Gas Exit Temperature (^{o}F)
EU1	35	0.75	~ 49	~ 290
EU2	20	2.5	~ 39	~ 1200
EU8	42	0.75	~ 73	~ 270

Table 7 Key:
EU# = Emission Unit Number
^{o}F = Degrees Fahrenheit
~ = approximate

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.

C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.

D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.

F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.

G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.

H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.

I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

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 Plan Approval 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:

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

This 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.

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.

Should you have any questions concerning this Plan Approval, please contact Amy Stratford by telephone at 413-755-2144, or in writing at the letterhead address.

Sincerely,

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.

Marc Simpson
Section Chief
Bureau of Air and Waste

ecc: MassDEP/Northeast - E. Braczyk
MassDEP/Central – Roseanna Stanley
MassDEP/Boston - Yi Tian, MassDEP Boston
MassDEP/Western - Peter Czapienski
Michael Lannan, P.E., Tech Environmental, Inc.