

Verification Report for CommonWealth New Bedford Energy, LLC Greater New Bedford LFG Utilization Project Dartmouth, Massachusetts

Voluntary Carbon Standard 2007.1

Verification Period: January 1, 2009 to June 30, 2009

September 2009

**Prepared by: First Environment, Inc.
91 Fulton Street
Boonton, New Jersey 07005**



1. Introduction

This report is provided to CommonWealth New Bedford Energy LLC (CNBE), a wholly owned subsidiary of CommonWealth Resource Management Corporation (CRMC), as a deliverable of the Voluntary Carbon Standard 2007.1 (VCS) project verification process. This report covers the verification of emission reductions from the destruction of landfill gas in four Caterpillar engine generators and a flare for the period from January 1, 2009 through June 30, 2009 at the Greater New Bedford LFG Utilization Project (the Project) in Dartmouth, Massachusetts. First Environment, Inc. (First Environment) completed the verification in August 2009.

2. Objectives

The purpose of this verification was, through review of appropriate evidence, to establish that:

- the Project conforms to the requirements of the verification criteria discussed in Section 4 of this report; and
- the data reported are accurate, complete, consistent, transparent, and free of material error or omission.

3. Verification Scope

Specific scope metrics for the verification are outlined in the table below:

Geographic Boundary	Crapo Hill Landfill, Dartmouth, Massachusetts
Greenhouse Gases Verified	Emissions reductions (expressed in units of Carbon Dioxide equivalents (CO ₂ -e) resulting from methane destruction
Reporting Period	January 1, 2009 through June 30, 2009
Data Sources	Metered Data and Emissions reduction calculations

4. Standards Used to Verify Emissions (Criteria)

The following table outlines the guidance and protocols used to conduct this verification:

Standard of Verification	Voluntary Carbon Standard 2007.1 and the CDM Methodology, AM0001, <i>Consolidated baseline and monitoring methodology for landfill gas project activities</i> , Version 9.1 and Validated VCS Project Document (PDD)
Verification Process	Voluntary Carbon Standard 2007.1
Level of Assurance	Reasonable assurance
Materiality	Misstatements greater than five percent of the emissions reductions assertion are considered material

The Audit Team was provided the Project Design Document in 2008. First Environment conducted the validation of the Project's approach as outlined in the PDD and approved it in a December 2008 report. First Environment used the Voluntary Carbon Standard 2007.1, ACM0001 (Version 9.1) and the validated PDD as the basis for the verification.

5. Overview of the Verification Process

To review the Project's GHG information, the following verification process was used:

- conflict of interest review;
- selection of Audit Team;
- initial interaction with CRMC's contact;
- development of the verification and sampling plan;
- review and evaluation of raw data and calculations for period under review;
- site audit;
- follow-up interaction with CRMC's contact for corrective action or supplemental data as needed; and
- final statement and report development.

The verification process was utilized to gain an understanding of the Project's emission sources and reductions (including the risk for leakage), to evaluate and verify the collection and handling of data, the calculations that lead to the results, and the means for reporting the associated data and results.

Conflict of Interest Review

Prior to beginning any verification project, First Environment conducts an evaluation to identify any potential conflicts of interest associated with the Project. No potential conflicts were found for this Project.

Audit Team

First Environment's Audit Team consisted of the following individuals who were selected based on their verification experience, as well as familiarity with landfill operations.

B. Tod Delaney, Ph.D., P.E., BCEE – Senior Management Oversight
Internal Reviewer - Jay Wintergreen
Lead Verifier - Alicia Chin
Verifier - Greg Kozak

Audit Kick-off

The verification audit was initiated with a conference call between First Environment and the primary CRMC contact, Thomas Yeransian, on July 28, 2009. The meeting focused on confirming the scope and process and schedule for the verification.

Development of the Verification Plan

The team formally documented its verification plan as well as determined the data-sampling plan. Both the verification plan and sampling plan were developed and provided to the CRMC on July 28, 2009.

Site Audit

Lead auditor, Alicia Chin, conducted a site visit on August 12, 2009 to assess the project's data management systems and interview personnel relevant to the project.

Emissions Reduction Data and Calculation Assessment

This assessment used information and insights gained during the previous steps to evaluate the collected data and reported emissions reduction quantities, and identify if either contained material or immaterial misstatements.

Corrective Actions and Supplemental Information

The team requested supplemental information and corrective actions during the verification process. The corrective actions requested and the responses provided are summarized in Section 7.

Verification Reporting

Verification reporting, represented by this report, documents the verification process and identifies its findings and results. Verification reporting consists of this report for CRMC and a verification statement and attestation to be submitted to VCS.

6. Site's Conformance with Verification Criteria

Site Overview

The landfill site is located west of Samuel Barnet Boulevard in the northeast portion of the Town of Dartmouth, Massachusetts on a 152-acre parcel of land. The landfill itself resides on 69.8 acres within the 152-acre parcel. The facility is not subject to New Source Performance Standards (NSPS) or other local, state, or federal regulations that would require it to collect and destroy landfill gas as evidenced by documentation included in Attachment A.

The landfill is owned and operated by the Greater New Bedford Regional Refuse Management District (the District). The District voluntarily installed an active landfill gas collection system consisting of lateral and vertical landfill gas extraction wells, header pipes connecting the wells, and a flare to combust the landfill gas in order to prevent odor issues and to provide a means for productive use of the landfill gas in the future. Two vacuum blowers were installed to pull the landfill gas to the flare. This initial system was completed and became operational in early 2000 (the District Initial System). The audit team has reviewed evidence confirming the start date of the District Initial System.

After the District Initial System was installed, the LFG collection system was subsequently expanded aggressively in anticipation of the development of an electric generating facility, which became operational in October 2005. Landfill gas collected/destroyed under the pre-existing system is not included within the scope of the project activity. The project activity consists of the expansion of the initial active collection system after January 1, 2002 and the installation and operation of the electric generating facility. Emission reductions are only claimed for landfill gas collected by the system installed from 2002 onwards and destructed in the four engines and flare.

The flare is operated by the District and is currently only turned on when the engine system must be shut down. The PDD provides additional details regarding the Site and the LFG collection and destruction systems.

CRMC is having this verification conducted on behalf of CNBE. CNBE wholly owns all environmental attributes associated with landfill gas destruction associated with this project. Evidence of credit ownership is presented in Attachment B.

First Environment previously verified emissions reduction credits from this Site for both CCX® and Environmental Resources Trust for crediting periods January 1, 2003 through December 31, 2008 and for GE-AES for crediting periods January 1, 2007 through December 31, 2008. GHG emissions reductions, due to the capture and combustion of methane gas for these historic crediting periods, have been registered with the American Carbon Registry (formerly ERT). Currently, all transactions involving the sale, retirement, or transfer of GHG credits from CRMC to another party (e.g., to the CCX) are recorded in the American Carbon Registry.

Data Collection and Monitoring Processes

The Audit Team discussed the following topics with site staff during the site visit in August 2009 and confirmed the information during this verification process:

- the data collection process; and
- internal documents and protocols that set guidelines for the data collection process.

The information gathered during these discussions was used to assess the Project's GHG information system and its controls for sources of potential errors, omissions, and misrepresentations.

Both flow data and gas quality data to the engines are collected in real time and recorded automatically in a database on and off site by the supervisory control and data acquisition (SCADA) system. The SCADA system is programmed to use the data and perform various calculations. The system will standardize gas flow, which is approximately around 110°F and 1.7 psi to 68°F and 1 atmosphere. The standardized flow is recorded in KSCF and is also converted to MMBtus. This data is also archived daily and stored off site to provide assurance that the records will be available for the lifetime of the project. Daily records are not destroyed and are retained for the lifetime of the project. This provides a high level of confidence in the data collection and storage process. The system is designed to trigger alarms when parameters fall outside a specified range. Each day the data is reviewed by CRMC staff to assess operating performance and to identify any additional issues that may not have been caught by the SCADA system.

The flow meter measuring gas to the engines was calibrated during this period on January 27, 2009, February 8, 2009, March 24, 2009, April 28, 2009, and June 5, 2009 in accordance with the procedures outlined in the PDD, as shown in Attachment C.

The continuous methane concentration analyzer was calibrated each week, or more frequently as necessary, in accordance with the PDD. Further, engine operations limit the variance of methane to no more than six percent because 1) the engine will shut down within an hour if above six percent, and 2) engine alarms notify the operator to recalibrate the instrument when a measurement is either higher than or lower than the actual value by four percent. These controls provide an additional level of confidence.

The electronically stored data is used to calculate the emissions reductions associated with the combustion of the LFG. A spreadsheet is used to perform and record the calculations. The calculations are reviewed internally to add an additional layer of quality control before the assertion is submitted to the verifier.

Flow data to the flare is also continuously monitored when the flare is turned on. When the flare is turned on, the Landtec GEM instrument is used to measure flow to confirm that the flow meter (totalizer) is accurate. Specifically, the Landtec GEM is used to measure the pressure drop across the orifice plate flow meter to calculate flow rate. This flow rate is checked against the totalizer to confirm that the totalizer is reading measurements accurately. In the event that the flare flow meter is off, site personnel can adjust the zero and span to bring the flow meter into calibration. Although records of the calibration were not available for review, site operating procedures and interviews indicate that this is conducted. Further, methane destroyed at the flare represents a relatively small percentage (~3%) of overall ERs claimed. An opportunity for improvement was identified during the verification surrounding the retention of records of calibrations for the flare flow meter. Future calibrations will be documented according to site personnel. Methane concentration is also taken with the GEM; however, it is not calibrated before each use (see CAR – section 7).

The data collection and record keeping procedures utilized were consistent with those outlined in the PDD and meet the requirements of the Project Methodology.

Emissions Reduction Calculation Assessment

As part of the emissions reduction calculation assessment, the Project's assumptions and calculations were reviewed. The Project used justifiable assumptions when defining the baseline scenario as the destruction of methane in the pre-2001 flare system as indicated in the validated PDD.

The SCADA system is programmed to calculate methane gas flow in units of MMBtu using standardized gas flow, methane concentration, and the current temperature and pressure. CRMC converts the MMBtus to total scf of methane gas flow for the purposes of calculating emission reductions.

Gas to the flare is determined by the difference between the totalizer readings. Methane concentration from the continuous gas analyzer is used instead of the GEM readings due to lack of calibration.

The emission reduction calculations, provided in Attachment D, were reviewed to ensure accuracy in the formulas used and the raw data and default factors used as inputs. The formulas were tested to ensure they were consistent with the calculations described in the CDM methodology and the validated PDD.

Copies of the raw data used in the calculations, including landfill gas flow and methane content data were compared with the data used in the final calculations and tested for transcription or mathematical errors. The short timeframe being verified allowed for inclusion of all raw data sources over the entire verification period. The calculations for the entire period were reviewed.

7. Audit Results

CRMC provided good documentation for their emissions estimates as well as its procedures surrounding the data collection process. The verification process focused on verifying the data and quantification methodology that was used by CRMC to calculate the emissions reductions, as shown on the spreadsheets in Attachment D. The calculations on the spreadsheet were found to be consistent with the approach outlined in the validated PDD.

To complete the verification process, First Environment made supplemental document requests, as well as two corrective action requests. The corrective action requests and CRMC's response is detailed below:

	Corrective Action Request	Response	Verification Conclusion
1	The project emissions calculations are not performed according to the "Tool to determine project emissions from flaring gases containing methane;" this is inconsistent with the requirements of the selected methodology, ACM0001, and the procedure set forth in the validated PDD.	CRMC calculates the project emissions from flaring by using the total mass flow rate and the methane portion of the mass flow rate. CRMC justifies their calculation in that it uses the same basic equations derived from Bernoulli's Equation for fluid flow as the methodology.	Response is acceptable
2	CDM methodology ACM0001 requires strong QA/QC procedure for gas quality equipment. Based upon the response from the landfill gas manager and the calibration records, we do not feel confident with the methane concentration readings by the GEM for the gas to the flare, and therefore, will not accept emissions reductions from the flare.	CRMC corrected the emission reductions to use the methane concentration readings from the continuous gas analyzer for the period that the flare was operating.	Response is acceptable

8. Verification Conclusion

First Environment was retained to provide verification services for the Project's greenhouse gas emission reductions assertion based on the following fundamentals:

- *Level of assurance:* Reasonable assurance;
- *Objectives of verification:* To assure project conformance with the Voluntary Carbon Standard 2007.1 and UNFCCC's ACM0001 (Version 9.1);
- *Validation or verification criteria:* Voluntary Carbon Standard 2007.1, and CDM Methodology ACM0001, Version 9.1;
- *Definition of materiality:* Misstatements of more than 5 percent of the GHG reduction assertion are considered material;
- *Scope, including:*
 - o *Boundaries of the assertion:* Crapo Hill landfill operations;
 - o *The physical infrastructure, facilities, and activities within the assertion:* MSW landfill and methane destruction operations;
 - o *GHG sources, sinks, and reservoirs included within the assertion:* Methane emission reductions expressed as carbon dioxide-equivalents; methane emissions from anaerobic digestion of waste; carbon dioxide emissions from operation of project equipment; and
 - o *The time period for the assertion:* January 1, 2009 to June 30, 2009.

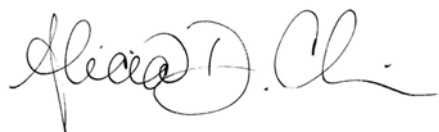
Based on the assessments performed and the historical evidence collected, First Environment concludes with a reasonable level of assurance that the emissions reductions at the Project resulting from the capture and combustion of methane gas for the period of January 1, 2009 to June 30, 2009, can be considered:

- consistent with the VCS PDD;
- in conformance with the Voluntary Carbon Standard 2007.1 and the CDM methodology ACM0001, Version 9.1;
- without material discrepancy; and
- meeting the minimum level of accuracy of at least 95 percent.

Verified results show:

Reporting Period: January 1, 2009 to June 30, 2009	
Baseline Emissions (tCO ₂ -e)	56,520
Project Emissions (tCO ₂ -e)	0
Emissions Reductions (tCO ₂ -e)	56,520

9. Verifier Signature

A handwritten signature in black ink, appearing to read 'Alicia Chin', written over a horizontal line.

Alicia Chin

ATTACHMENT A

151 Campanelli Drive, Suite B
Middleborough, MA 02346

Tel: (508) 923-0879
Fax: (508) 923-0894



February 11, 2009

Director, Air Management Division
U. S. Environmental Protection Agency
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Re: Design Capacity Report, Crapo Hill Landfill, Dartmouth, MA
40 CFR Part 60, Subpart WWW

Dear Sir or Madam:

The Greater New Bedford Regional Refuse Management District has recently received an operating permit (Authorization to Operate) from the Massachusetts Department of Environmental Protection that increases the design capacity of the Crapo Hill Sanitary Landfill. Identifying information is as follows:

Name and address of landfill:

Crapo Hill Sanitary Landfill
300 Samuel Barnet Boulevard
New Bedford, MA 02745
508-998-5674

(Note: Landfill is located in Dartmouth, MA but the mail address is New Bedford, MA)

Name and address of landfill owner and operator:

Greater New Bedford Regional Refuse Management District
300 Samuel Barnet Boulevard
New Bedford, MA 02745
508-763-5924
Hank Van Laarhoven, Director of Operations

Permits issued by the Massachusetts Department of Environmental Protection for the construction and operation of the Crapo Hill Landfill include the following:

- Solid Waste Facility Permit and Authorization to Construct Phase 1, January 26, 1993, approving 69.8 acres of sanitary landfill and specifically authorizing construction of 18.6 acre Phase 1.
- Authorization to Operate Phase 1, December 28, 1994.
- Landfill Major Modification, Phase 1 Grades, February 3, 2000, authorizing a re-configuration of the Phase 1 final elevations.
- Authorization to Construct New Phase of Permitted Landfill, July 12, 2000, authorizing construction of 10 acre Phase 2, Cells #1 and #2.
- Authorization to Operate Phase 2 Cells #1 and #2, April 22, 2002.
- Authorization to Construct New Phase of Permitted Landfill, December 15, 2006, authorizing construction of 9.5 acre Phase 2, Cells #3 and #4.
- Authorization to Operate Phase 2 Cells #3 and #4, September 8, 2008.

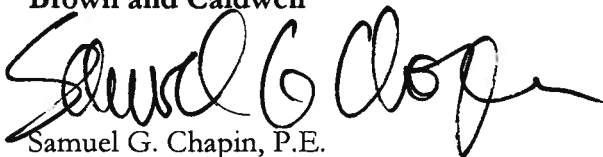
The total permitted capacity of the landfill is 1,886,904 cubic meters. A calculation of this permitted capacity is attached. Also attached is a site locus map and a drawing depicting areas where landfilling is authorized.

The Crapo Hill Landfill is currently provided with an active landfill gas collection and control system comprising 37 vertical extraction wells, approximately 10,000 feet of horizontal gas collectors, a 2,000 scfm open flare, and a landfill gas-fueled electric power generating plant. In addition, passive vent flares are used on the landfill to provide localized landfill gas control. The landfill gas collection and control system is fully approved by the Massachusetts Department of Environmental Protection.

Please contact Hank Van Laarhoven Director of Operations, Crapo Hill Sanitary Landfill, or me if you have any questions.

Very truly yours,

Brown and Caldwell



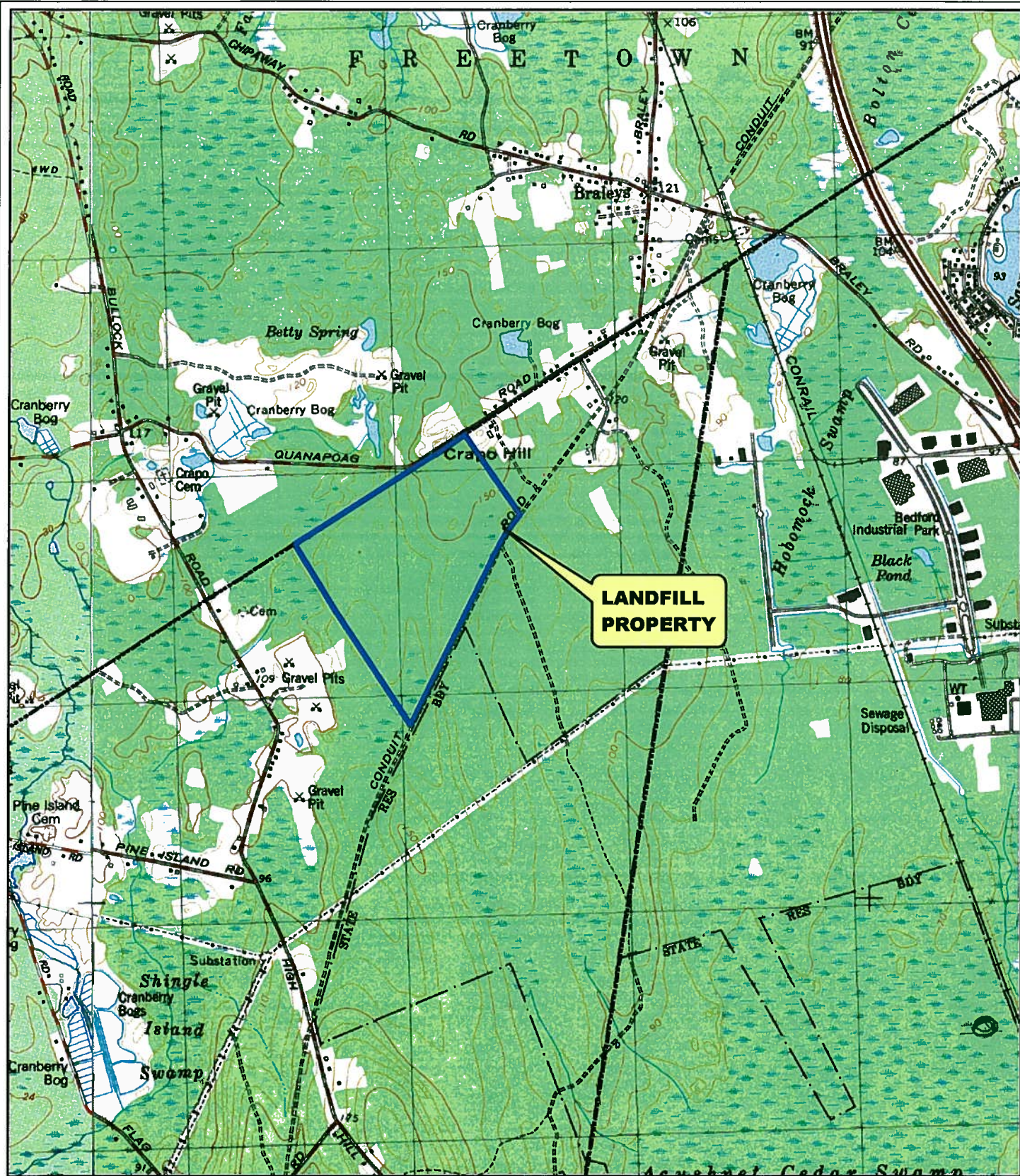
Samuel G. Chapin, P.E.
Supervising Engineer

SGC/
135761 Design Capacity Report NSPS 2009

Enclosure

Copy: Greater New Bedford Regional Refuse Management District

Crapo Hill Landfill		
Dartmouth, MA		
Design Capacity		
Landfill Area	Volumes in cubic yards	Notes/Data Source
Phase 1		
Gross Volume	1,286,000	Camp, Dresser & McKee Permit Documents
Final Cover	63,243	2 foot thick over 19.6 acre slope area
Net Usable Volume	1,222,757	
Daily and Intermediate Cover	330,144	Average 27% by volume over life of landfill
Net Waste Volume	892,613	
Phase 1 Permit Modification		
Gross Volume	275,000	CGK Environmental calculation
Final Cover		no increase in final cover
Net Usable Volume	275,000	
Daily and Intermediate Cover	74,250	Average 27% by volume over life of landfill
Net Waste Volume	200,750	
Phase 2 Cells #1 and #2		
Gross Volume	977,638	Brown and Caldwell digital modeling
Final Cover	33,880	2 foot thick over 10.5 acre slope area
Net Usable Volume	943,758	
Daily and Intermediate Cover	254,815	Average 27% by volume over life of landfill
Net Waste Volume	688,943	
Phase 2 Cells #3 and #4		
Gross Volume	971,500	Brown and Caldwell digital modeling
Final Cover	32,423	2 foot thick over 10.0 acre slope area
Net Usable Volume	939,077	
Daily and Intermediate Cover	253,551	Average 27% by volume over life of landfill
Net Waste Volume	685,526	
Total Waste Volume		
(Design Capacity)	2,467,832	
Waste Volume in cubic meters		
(Design Capacity)	1,886,904	1 cu. yd. = 0.7646 cu. meter
Gross Volume, cubic yards	3,510,138	
Gross Volume, cubic meters	2,683,852	



BROWN AND CALDWELL

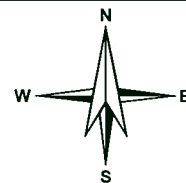
151 Campanelli Drive, Suite B
Middleborough, Massachusetts, 02346
Tel. (508) 923-0879 Fax. (508) 923-0894

Note: USGS Quad Maps obtained from MassGIS scanned 5-CDset, dated July 1996. All other data from MassGIS Data Viewer software, updated Mayr 2008.

FIGURE 1 SITE LOCATION MAP

**Crapo Hill Sanitary Landfill
Dartmouth, Massachusetts**

Prepared for:
Greater New Bedford Regional
Refuse Management District



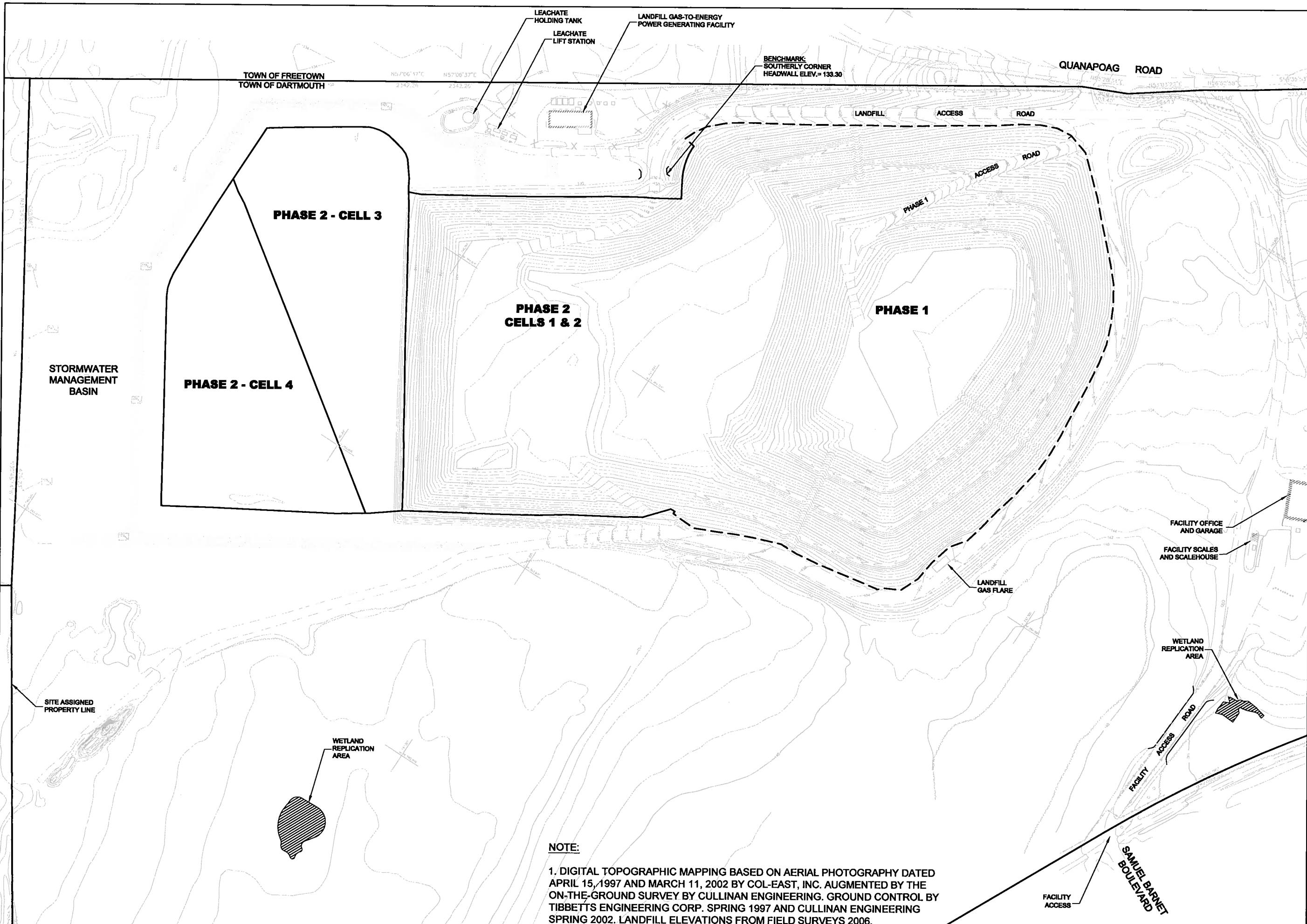
0 500 1,000 2,000
Feet

Date: 01/2009

Project: 135761

Scale: 1" = 2000'

File: Site Locus



BROWN AND CALDWELL 48 Leona Drive, Suite C Middleborough, Massachusetts 02346 Tel. (508) 923-0879 • Fax. (508) 923-0894	PROJECT:	135761	FILE:	135761_NSPS Site Plan	SITE PLAN
	SCALE:	1"=200'	DATE:	FEBRUARY 2009	CRAPO HILL SANITARY LANDFILL DARTMOUTH, MASSACHUSETTS
	DRAWN:	R.J.F.	CHECKED:	S.G.C.	PREPARED FOR: GREATER NEW BEDFORD REGIONAL REFUGE MANAGEMENT DISTRICT

ATTACHMENT B

SITE LEASE AGREEMENT

BETWEEN

GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT

and

COMMONWEALTH NEW BEDFORD ENERGY LLC

Dated as of December 31, 2003

SITE LEASE AGREEMENT

This Site Lease Agreement (the "*Lease Agreement*") is made as of the 31st day of December, 2003, by and between **GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT**, a Massachusetts regional refuse district with principal offices at 300 Samuel Barnet Boulevard, New Bedford, Massachusetts ("*Lessor*"), and **COMMONWEALTH NEW BEDFORD ENERGY LLC**, a Delaware limited liability company, with principal offices at 199 Corey Street, Boston, Massachusetts ("*Lessee*"). Lessor and Lessee are referred to herein together as the "*Parties*" and singly as a "*Party*".

RECITALS

WHEREAS, Lessor owns and operates the Crapo Hill Sanitary Landfill located at Samuel Barnet Boulevard, New Bedford, Massachusetts (as further defined herein, the "*Landfill*");

WHEREAS, Lessor and Lessee have entered into that certain Landfill Gas Purchase & Sale Agreement (the "*Landfill Gas Purchase & Sale Agreement*") contemporaneous with the execution of this Lease Agreement, whereby Lessee will purchase any and all gas elements developed through the decomposition of waste deposited in the Landfill and collected and produced by Lessor (the "*Landfill Gas*") to fuel a planned electric generation facility (the "*Generating Facility*"); and

WHEREAS, in order to carry out the purposes of the Landfill Gas Purchase & Sale Agreement, Lessor wishes to lease to Lessee and Lessee wishes to accept from Lessor, land within or adjacent to the Landfill on which Lessee may construct, operate and maintain the Generating Facility, together with other appurtenant rights.

NOW THEREFORE, in consideration of the premises and mutual covenants set forth herein and subject to the terms and conditions hereof, the Parties hereby agree as follows:

Article 1. Definitions

Capitalized terms when used herein shall have the meanings set forth below:

"*Access and Performance Easements*" shall have the meaning set forth in Section 2.2 hereof.

"*Additional Contingent Payments*" shall have the meaning set forth in Section 5.3 hereof.

"*Applicable Laws*" shall mean any act, statute, law, regulation, permit, license, ordinance, rule, judgment, order, decree, or written directive, guideline or policy (to the extent mandatory) or any similar form of decision or determination by any governmental

authority with jurisdiction over the LFGMS, the Landfill, the Generating Facility or the performance of the work hereunder and the transaction contemplated hereunder.

"Base Rent" shall have the meaning set forth in Section 5.1 hereof.

"Contingent Payments" shall have the meaning set forth in Section 5.2 hereof.

"Contract Year" shall mean every twelve (12) month period which begins at 12:01 a.m. Eastern Standard Time on January 1 and on every anniversary thereof during the Term.

"Day" shall mean a calendar day.

"Delivery Point" shall have the meaning set forth in the Landfill Gas Purchase & Sale Agreement.

"Easements" shall mean the Access and Performance Easements, the Lessee Electric Easements and the Other Utility Easements.

"Effective Date" shall mean the date on which both Parties have executed this Lease Agreement.

"Electric Utility" means NSTAR, its predecessors, successors and affiliates.

"Electric Utility Easement" shall have the meaning set forth in Section 2.3 hereof.

"Environmental Attributes" shall have the meaning set forth in Section 6.4 hereof.

"Force Majeure" shall mean acts of God, strikes, lockouts or other industrial disturbances, epidemics, landslides, lightning, earthquakes, fires, storms, hurricanes, floods, high-water washouts, acts of the public enemy, wars, blockades, insurrections, riots, arrests and restraints by governments, civil disturbances, catastrophic events such as explosions, breakage or accident to machinery or lines of pipe caused by the foregoing and governmental actions such as the enactment of statutes, laws or regulations frustrating the purpose of this Lease Agreement, not within the control of the Party claiming Force Majeure and which, by the exercise of reasonable diligence, such Party is unable to prevent or overcome. Force Majeure shall not include increases in the costs associated with the construction or operation of the Generating Facility or the LFGMS or a change in market conditions or any other event not specifically enumerated above which makes uneconomic the operation of the Generating Facility or the LFGMS or the sale of Landfill Gas or any component thereof or the sale of electricity generated by the Generating Facility.

"Gap" shall have the meaning set forth in Section 2.3 hereof.

| *

to confirm or restate the provisions of this Section 5.7 or substantially similar provisions or evidence the senior status of any Lender Security Interest or any debt to Lender so long as such documents or instruments are consistent with the expressed intent of this Section 5.7, including but not limited to any intercreditor or subordination agreements with any Lender or prospective Lender.

If, having made commercial reasonable efforts, Lessee is unable to obtain debt financing due in whole or in part to the existence of the Lessor Security Interest, then at the request of Lessee the Parties shall negotiate in good faith another equivalent form of security assuring Lessor that Lessee will make the Secured Payments, such as a payment bond in favor of Lessor or prepayment of some or all of the Secured Payments.

Article 6. Taxes and Environmental Benefits

6.1. Income Taxes. Each Party shall be responsible for any federal, state and local taxes based upon or measured by its income, and any franchise taxes based upon its corporate existence.

6.2 Property Taxes. Lessor shall be responsible for any taxes and assessments against the Landfill and the Site as and when they become due. Lessee shall pay all taxes (real and personal) and assessments allocable to the Generating Facility, the Site Lease or Easements. Lessor and Lessee shall make reasonable efforts to ensure that the Site and Generating Facility are separately assessed by any taxing authorities. Lessee shall have the right but not the obligation, to contest the validity of any assessment of such taxes or assessment and/or any relevant authority's failure to separately assess the Generating Facility. Lessor shall reasonably cooperate with and assist Lessee in any contest at Lessee's sole cost.

6.3 Lessee Tax Credits.

(a) As between the Parties, Lessee shall have sole title to any tax credits under Section 45 of the Internal Revenue Code or any other similar state, federal or local credits or deductions, payments or benefits arising from the purchase of Landfill Gas or the generation and sale of electricity using Landfill Gas as a fuel (as opposed to the production, extraction and sale of Landfill Gas) shall belong to Lessee.

(b) The Parties recognize that the LFGMS presently does not qualify for tax credits under Section 29 of the Internal Revenue Code. If Section 29 is amended or extended in a manner that allows the LFGMS to qualify for Section 29 tax credits and Lessee exercises its option under Section 7.3 hereof and takes an ownership interest in the LFGMS, it is the intent of the Parties that Lessee will be entitled to claim the Section 29 tax credits.

(c) All tax credits referenced in subparagraphs (a) and (b) above are referred to collectively herein as "*Lessee Tax Credits*".

6.4 Environmental Attributes. Lessee and/or its designees, successors and assigns, shall have the right, beginning on the date that the Generating Facility becomes operational and so long as this Lease Agreement is in effect thereafter, to all attributes of an environmental or other nature, known or unknown at the time of this Lease Agreement, including but not limited to allowances, certificates, RECs or other green power price premiums or similar constructs generated by or attributable to the Generating Facility by virtue of its classification as a renewable energy project under Applicable Laws, emissions credits and all other credits, offsets, tradable renewable certificates (sometimes referred to as "green tags"), and all similar rights issued, recognized, created or otherwise arising from use or disposition of the Landfill Gas delivered to Lessee, including but not limited to the generation and/or sale of electricity at the Generating Facility using Landfill Gas, the delivery and/or sale of capacity (the Generating Facility's capability to reliably generate a specific amount of electricity at a given point in time) and electricity to any purchaser thereof, the production of thermal energy or other energy products as a by-product of generating electricity at the Generating Facility, and the destruction of such Landfill Gas ("*Environmental Attributes*"). Environmental Attributes include but shall not be limited to those that are created by regulations, statutes, or other governmental action enacted before or after the Effective Date. Environmental Attributes include but shall not be limited to those that can be used to (1) claim responsibility for the reduction of emissions and/or pollutants, (2) claim ownership of emission and/or pollution reduction rights, and (3) claim reduction or avoidance of emissions or pollutants. Emissions and pollutants include, but are not limited to, acid rain precursors, carbon dioxide, carbon monoxide, chlorinated hydrocarbons, greenhouse gases, mercury, metals, methane, nitrogen oxides, nitrogen-oxygen compounds, ozone precursors, particulate matter, sulfur dioxide, toxic air pollutants, other carbon and sulfur compounds, and similar pollutants or contaminants of air, water or soil, under any governmental, regulatory or voluntary program, including but not limited to the United Nations Framework Convention on Climate Change and related Kyoto Protocol or any other program. Environmental Attributes exclude Section 45 tax credits, Section 29 tax credits and any and all other tax credits or benefits associated with the ownership or operation of the Generating Facility or production of Landfill Gas. Prior to the date that the Generating Facility becomes operational, Lessor shall have the right to any Environmental Attributes attributable to the Landfill or the LFGMS.

6.5 Protection of Environmental Attributes and Lessee Tax Credits. The provisions of this Lease Agreement are intended to ensure that, as between Lessor and Lessee, Lessee shall have all right, title and interest in any Environmental Attributes and Lessee Tax Credits beginning on the date that the Generating Facility becomes operational. Lessor shall not, under any circumstances, take or claim credits, deductions, payments or benefits that would in any way reduce the amount or diminish or impair the value of the Environmental Attributes or any Lessee Tax Credits, or take any other avoidable action that Lessee reasonably demonstrates would reduce, diminish or impair any Environmental Attributes or Lessee Tax Credits. Lessor and Lessee shall also avoid taking any action that would undermine the claim of Lessee Tax Credits. However, Lessor shall have no duty hereunder to affirmatively enhance or improve Lessee's ability to realize Environmental Attributes or Lessee Tax Credits except for Lessor's duty to

35

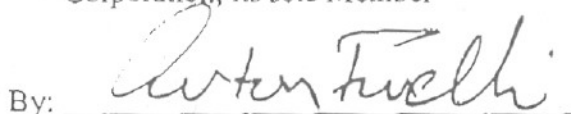
WHEREFORE, Lessor and Lessee have set their hands and seals as of the date
at above.

LESSOR: Greater New Bedford Regional Refuse
Management District

By: 
David L. Vincent, Chairperson

LESSEE: Commonwealth New Bedford Energy LLC

By: Commonwealth Resource Management
Corporation, its sole Member

By: 
Anton Finelli, President

Signed before me on
12/31/03

Deborah L. Piva

DEBORAH L. PIVA

Notary Public

My Commission Expires July 31, 2009

LANDFILL GAS PURCHASE & SALE AGREEMENT

between

GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT

and

COMMONWEALTH NEW BEDFORD ENERGY LLC

Dated as of December 31, 2003

LANDFILL GAS PURCHASE & SALE AGREEMENT

THIS LANDFILL GAS PURCHASE & SALE AGREEMENT (the "*Agreement*") dated as of December 31, 2003 is by and between **GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT**, a Massachusetts regional refuse district with principal offices at 300 Samuel Barnet Boulevard, New Bedford, Massachusetts ("*Seller*"), and **COMMONWEALTH NEW BEDFORD ENERGY LLC**, a Delaware limited liability company, with principal offices at 199 Corey Street, Boston, Massachusetts ("*Purchaser*"). Seller and Purchaser are referred to herein together as the "*Parties*" and singly as a "*Party*".

RECITALS

WHEREAS, Seller owns and operates the Landfill;

WHEREAS, Seller owns and operates Landfill Gas extraction facilities and management systems at the Landfill;

WHEREAS, pursuant to the Lease Agreement (defined below) Seller has granted to Purchaser certain rights in the Site for the purposes of constructing, owning and operating the Generating Facility that will be designed to use Landfill Gas for fuel; and

WHEREAS, Seller wishes to deliver and sell to Purchaser, and Purchaser wishes to purchase from Seller, all of the Landfill Gas extracted by Seller from the Landfill in accordance with the terms and conditions hereof, for the purpose of using such Landfill Gas as a fuel source for the Generating Facility.

NOW, THEREFORE, in consideration of the mutual agreements contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, Seller and Purchaser agree as follows:

Article 1. Definitions

Capitalized terms when used herein shall have the meanings set forth below. Capitalized terms not defined below are as defined in the Lease Agreement.

"*Agreement*" shall mean this Landfill Gas Purchase & Sale Agreement, including all exhibits and schedules hereto, as the same may be amended from time to time.

"*BTU*" shall mean British Thermal Unit.

"*Delivery Commencement Date*" shall mean the date on which Seller commences delivery of Landfill Gas to Purchaser and Purchaser accepts initial delivery of Landfill Gas from Seller, in accordance with the terms hereof, which shall occur on the Day specified by Purchaser in a notice to Seller by at least ten (10) Days advance notice;

three (3) consecutive Days, after which Purchaser's obligation to pay for Landfill Gas shall resume. Thereafter, any further deficiency will require a new notice.

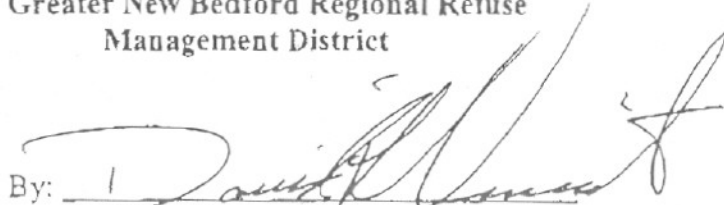
2.5 Suspension of Delivery and Purchase Obligation for Force Majeure, Scheduled Outages and Failure of Electricity Purchaser to Accept Electricity. The delivery and purchase obligations described in Section 2.1 hereof shall be suspended (a) during events of Force Majeure affecting Seller or Purchaser, (b) during scheduled outages of the LFGMS or of the Generating Facility, or (c) during any period of time not to exceed ninety (90) Days within any twelve (12) month period that any purchasers of electricity from the Generating Facility are not accepting electricity from Purchaser, unless the failure to take electricity is caused by the actions or inaction of Purchaser (Purchaser shall notify Seller in writing within two (2) business Days of such event and shall make good faith diligent efforts to sell the electricity from the Generating Facility). Each Party shall notify the other Party of a scheduled outage of the first Party's facilities at least thirty (30) Days in advance of the scheduled commencement of the outage. No scheduled outage of the LFGMS shall exceed one (1) Day. Seller's scheduled outages shall be limited to a total of three (3) Days in any Contract Year. Each Party shall coordinate its scheduled outages with the other Party to avoid interference with the operation of the other Party's facility.

2.6 Environmental Attributes. Seller acknowledges and agrees that Purchaser shall have the right to all Environmental Attributes, as that term is defined and described in Section 6.4 of the Lease Agreement. / *

2.7 Purchaser-Funded Improvements to LFGMS. If Seller does not deliver Landfill Gas meeting the Minimum Methane Content requirement on an average basis over three (3) consecutive days, and if Purchaser determines that capital improvements or adjustments to the LFGMS are required to maintain the Minimum Methane Content, Purchaser may send written notice to Seller that capital improvements or adjustments to the LFGMS are required, including all information describing the improvements or adjustments. If Seller does not agree within ten (10) Days after receipt of Purchaser's written notification to undertake such capital improvements or adjustments within forty (40) Days of such notification, then Purchaser may undertake such capital improvements or adjustments including recalibration of the LFGMS. Purchaser shall make all such improvements or adjustments in a good and workmanlike manner in accordance with Applicable Laws and generally accepted industry practice. Purchaser shall then be entitled to offset up to \$50,000 of the reasonable cost incurred by Purchaser to make such capital improvements or adjustments attributable to the failure to meet Minimum Methane Content against any payments due to Seller hereunder until Purchaser has been fully reimbursed for such reasonable costs up to \$50,000. If the Parties mutually agree, the \$50,000 ceiling on reimbursable capital improvements or adjustments may be increased. In no event shall the amount of such capital improvements or adjustments setoff against Seller's payment exceed \$100,000 in any one Contract Year. With respect to any substantial capital improvements, Purchaser shall (a) provide Seller with copies of the contractor's certificates of insurance in compliance with Section 9.1 of the Lease Agreement, (b) provide Seller with copies of any as-built drawings delivered to Purchaser

WHEREFORE, the Parties hereto have caused the execution of this Agreement by the officers whose names appear below as of the Effective Date.

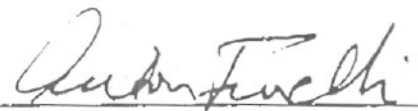
Greater New Bedford Regional Refuse
Management District

By: 

David L. Vincent, Chairperson

Commonwealth New Bedford Energy LLC

By: Commonwealth Resource Management
Corporation, its sole Member

By: 

Anton Finelli, President

Signed before me on 12/31/03

Deborah L. Piva

DEBORAH L. PIVA

Notary Public

My Commission Expires July 31, 2009

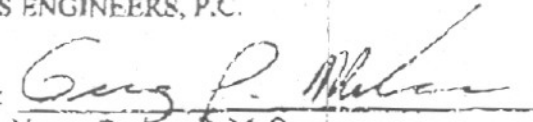
ENGINEER CERTIFICATE

The undersigned engineer hereby issues this certificate to the best of its knowledge after due inquiry and review in connection with Section 3.3(a)(iv) of the Construction and Term Loan Agreement dated February 18, 2005 between Hudson United Bank and Commonwealth New Bedford Energy, LLC (the "Loan Agreement"). (Capitalized terms defined herein that are in the Loan Agreement shall have the meaning therein provided):

1. the Project has been completed in accordance with the Construction Contracts and the Operations and Maintenance (other than Punch List Items, the completion of which will not interfere with the commercial operation of the Project or cause it to operate at levels material different than those forming the basis of the projections in the Closing Pro Forma);
2. all tests required for Final Performance Acceptance have been successfully completed, except for the gross heat rate test, which required adjustment of the Closing Pro Forma;
3. the Project has commenced Commercial Operation under the Power Purchase and Sales Agreement, the Operations and Maintenance Agreement, and the Landfill Gas Purchase and Sale Agreement;
4. the Project appears to be capable of achieving the operating revenue as projected in the Closing Pro Forma (dated November 23, 2005), which incorporates a revised heat rate value estimated during the Performance Test;
5. all Approvals required to commission and operate the Project are in full force and effect; and
6. all necessary fuel and utility services are available for the Project.

Executed as of this 5th day of December, 2005.

SCS ENGINEERS, P.C.

By: 

Name: Gregory P. McCarron

Title: Vice President

ATTACHMENT C

Landfill Gas Flow Calculation							
Crapo Hill Landfill, New Bedford/Dartmouth, Massachusetts							
Note: Calculation of volumetric flow of LFG through a pipe using a pitot tube and manometer.							
		Engine 1, kW	835	750	795	825	750
		Engine 2, kW	820	800	800	825	740
		Engine 3, kW	820	700	790	825	740
		Engine 4, kW	-	800	815	-	740
		Gross, kW	2,475	3,050	3,200	2,475	2,970
MEASURING INSTRUMENT:		Pitot Tube:	166	166	166	166	166
		Manometer:	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II
DATE OF MEASUREMENT:			27-Jan-09	8-Feb-09	24-Mar-09	28-Apr-09	5-Jun-09
TIME OF MEASUREMENT:			2:30	12:30	11:30	14:00	9:15
PARAMETERS		UNITS	VALUES	VALUES	VALUES	VALUES	VALUES
Pipe dimensions							
Inside Diameter		inches	10.420	10.420	10.420	10.420	10.420
Area of cross section		square feet	0.5922	0.5922	0.5922	0.5922	0.5922
Flow Calculation							
Kp pitot tube constant		ft/sec[(lb/lb-mole)(in. Hg)/(R)(in H2O)]^1/2	85.49	85.49	85.49	85.49	85.49
Cp Pitot tube coefficient		dimensionless	1.00	1.00	1.00	1.00	1.00
dP Average velocity pressure of stack gas		in H2O	0.148	0.259	0.318	0.159	0.320
Blower Inlet							
Ts Stack temperature		Degrees Fahrenheit	65	60	64	74	80
		Degrees Rankine	525	520	524	534	540
Pg Stack static pressure		inch H2O	-32	-57	-58	-48	-60
		inch Hg	(2.35)	(4.19)	(4.27)	(3.53)	(4.41)
Ps Absolute stack gas pressure		inch Hg	28.02	26.10	25.97	26.52	25.62
Blower Outlet							
Ts Stack temperature		Degrees Fahrenheit	88	110	110	110	109
		Degrees Rankine	548	570	570	570	569
Pg Stack static pressure		inch H2O	44.3	44.3	44.3	44.3	47.1
		inch Hg	3.26	3.26	3.26	3.26	3.46
		psig	1.60	1.60	1.60	1.60	1.70
Pbar Barometric pressure		inch Hg	30.37	30.29	30.24	30.05	30.03
Ps Absolute stack gas pressure		inch Hg	33.63	33.55	33.50	33.31	33.49
Ms Molecular weight of stack gas, wet		lb/lb-mole	27.44	27.87	28.05	27.64	27.97
Vs Average stack gas velocity		feet per second	27.1	36.8	40.9	29.1	42.0
Qact Volumetric Flow		actual cubic feet per minute	964	1,306	1,452	1,033	1,492
Qstd Volumetric Flow at actual methane content		standard cubic feet per minute *	908	1,157	1,270	905	1,249
Qstd Volumetric Flow at 50% methane		standard cubic feet per minute **	1,013	1,291	1,417	1,010	1,394
Ht HHV Heat input		MMBtu per hour HHV	30.76	39.20	43.02	30.67	42.31
Ht LHV Heat input		MMBtu per hour LHV	27.69	35.29	38.73	27.61	38.09
Methane Content		%, vol/vol wet	58.40%	54.50%	52.98%	57.30%	52.60%
Diff. between pitot tube and orifice reading:			0.967	1.027	1.016	0.983	1.003
dP Delta pressure across orifice plate		inches H2O	5.70	10.90	12.90	6.20	12.20
Qact Volumetric Flow		acfm	811	1,144	1,244	863	1,205
Qstd Volumetric Flow at actual methane content		standard cubic feet per minute *	878	1,188	1,290	890	1,252
Qstd Volumetric Flow at 50% methane		standard cubic feet per minute **	1,026	1,295	1,367	1,019	1,317
Ht HHV Heat input		MMBtu per hour HHV	31.14	39.31	41.51	30.95	39.99
Ht LHV Heat input		MMBtu per hour LHV	28.04	35.39	37.37	27.86	36.00
* Standard conditions are corrected to 68 degrees F and 29.92 in Hg at actual methane content.							
** Standard conditions corrected to 50 % methane content.							
Input values are in blue or bold.							
Calculated output values are in black or not bold.							
Calculation Formulas:							
Vs = Kp*Cp*(sqrt dP) * sqrt (Ts/(Ps*Ms))							
Qact = Vs * A * 60							
Qstd = Qact * Tstd/ Ts * Ps/Pstd							
Flow, ACFM = 96.3221*SQRT(dP)*SQRT((460+Temperature)/(2.703*(Pressure +14.7)))							
Conversions and constants							
13.596 in H2O/in Hg							
1 PSI = 2.036 in HG							
1 PSI = 27.68 in WG							
Tstd = 528 degrees R							
Pstd = 29.92 in Hg							
Methane heat content = 1,012 BTU per scf HHV							
Methane heat content = 911 BTU per scf LHV							

Landfill Gas Flow Measurements					
Crapo Hill Landfill, New Bedford/Dartmouth, Massachusetts					
Measurements by	TY/RB	TY/RB	TY/RB	TY/RB	TY/RB
Date	27-Jan-09	8-Feb-09	24-Mar-09	28-Apr-09	5-Jun-09
Time	2:30	12:30	11:30	14:00	9:15
Flow valve	NA	NA	NA	NA	NA
Pipe inside diameter, inches	10.42	10.42	10.42	10.42	10.42
Orifice measurement, cfm	NA	NA	NA	NA	NA
Ambient Temperature, F	45	37	37	76	65
Barometric Pressure, In Hg	30.37	30.29	30.24	30.05	30.03
Blower Inlet Temperature, F	65	60	64	74	80
Outlet Temperature, F	88	110	110	110	109
Blower Inlet Pressure (SP), In H2O	-32	-57	-58	-48	-60
Blower Outlet Pressure, PSIG	1.60	1.60	1.60	1.60	1.70
Blower Outlet Pressure, In H2O	44.29	44.29	44.29	44.29	47.06
Measurement					
Manometer					
Pitot Tube					
Velocity Pressure (dP)					
Point					
1	0.13	0.25	0.3	0.15	0.32
2	0.15	0.26	0.32	0.16	0.32
3	0.15	0.26	0.32	0.16	0.32
4	0.15	0.26	0.32	0.16	0.32
5	0.15	0.26	0.32	0.16	0.32
6	0.15	0.26	0.32	0.16	0.32
7	0.15	0.26	0.32	0.16	0.32
8	0.15	0.26	0.32	0.16	0.32
9					
Average	0.148	0.259	0.318	0.159	0.320
Gas Composition					
Compound					
CH4	58.4%	54.5%	53.0%	57.3%	52.6%
CO2	40.6%	40.4%	39.5%	41.6%	39.6%
O2	0.00%	0.27%	0.55%	0.21%	0.67%
Balance	1.00%	4.92%	6.98%	0.93%	7.10%
Total	100.0%	100.1%	100.0%	100.0%	100.0%

ATTACHMENT D

EXHIBIT 1				
CommonWealth New Bedford Energy LLC				
Greater New Bedford LFG Utilization Project				
Dartmouth, Massachusetts				
Calculation of Verified Emission Reduction Credits in CO2 equivalent tons				
in accordance with the Project Methodology				
Key parameters used in calculations				
Parameter				VCS
Methane oxidation efficiency electricity generation				100.0%
Methane oxidation efficiency LFG flaring				50.0%
Methane, molecular weight				16
Pounds per metric ton				2,205
Gas constant (scf per lb-mole)				385
Global Warming Potential (GWP) methane				21
Summary results				
	Unit			
Electricity generation				
Start date				1-Jan-09
End date				30-Jun-09
Methane delivered	scf			316,474,489
Emission Reductions	metric tons CO2e			60,992
Flaring				
Start date				1-Jan-09
End date				30-Jun-09
Methane delivered	scf			9,737,784
Emission Reductions	metric tons CO2e			1,927
Subtotal				
Methane delivered	scf			326,212,273
Emission Reductions	metric tons CO2e			62,920
District Initial System				
Methane delivered	scf			16,170,099
Emission Reductions	metric tons CO2e			6,400
Total				
Emission Reductions eligible under VCS program	metric tons CO2e			56,520

EXHIBIT 2														
CommonWealth New Bedford Energy LLC														
Emission Reductions from methane oxidation during energy generation														
Physical constants:														
Methane, molecular weight (lb per lb-mole)				16					Calculation of Verified Emission Reduction in CO2 equivalent tons per the following:					
Pounds to metric ton				2,205					Verification Process: UNFCCC's CDM methodology ACM0001 (Version 9.1)					
Gas constant, scf per lb-mole				385					Standard of Verification: Voluntary Carbon Standard 2007.1					
Begin period - date	End period - date	Totalizer reading end period	Totalizer reading start period	Total in period	Methane delivered to engines	Methane delivered cumulative	Methane delivered in the period	Methane delivered in the period	Methane oxidation efficiency	MD electricity, Mass methane destroyed in the period	MD electricity, Mass methane destroyed cumulative	Global warming potential methane	Emission reduction	Emission reduction cumulative
mm/dd/yy	mm/dd/yy	MMBtu HHV	MMBtu HHV	MMBtu HHV	scf	scf	metric tons	metric tons	%	metric tons	metric tons	tons CO2 equivalent per ton methane	CO2 equivalent metric tons	CO2 equivalent metric tons
1-Jan-09														
1-Jan-09	31-Jan-09	24,475	-	24,475	24,184,783	186,557,965	456	456	100.0%	456	3,516	21	9,572	9,572
1-Feb-09	28-Feb-09	50,010	24,475	25,535	25,232,213	211,790,179	476	931	100.0%	476	3,992	21	9,987	19,559
1-Mar-09	31-Mar-09	78,789	50,010	28,779	28,437,747	240,227,926	536	1,467	100.0%	536	4,528	21	11,256	30,814
1-Apr-09	30-Apr-09	102,146	78,789	23,357	23,079,567	263,307,493	435	1,902	100.0%	435	4,963	21	9,135	39,949
1-May-09	31-May-09	127,896	102,146	25,750	25,444,664	288,752,157	480	2,382	100.0%	480	5,442	21	10,071	50,020
1-Jun-09	30-Jun-09	155,951	127,896	28,055	27,722,332	316,474,489	522	2,904	100.0%	522	5,965	21	10,972	60,992

EXHIBIT 3																
CommonWealth New Bedford Energy LLC																
Calculation of Verified Emission Reduction in CO2 equivalent tons per the Project Methodology																
Emission Reductions from methane oxidation from LFG flaring																
Physical constants:																
Methane, molecular weight (lb per lb-mole)				16												
Pounds to metric ton				2,205												
Gas constant, scf per lb-mole				385												
										Calculation of Verified Emission Reduction in CO2 equivalent tons per the following						
										Verification Process: UNFCCC's CDM methodology ACM0001 (Version 9.1)						
										Standard of Verification: Voluntary Carbon Standard 2007.1						
Begin period - date	End period - date	Totalizer reading end period	Totalizer reading start period	Total in period	Methane delivered to flare	Methane delivered cumulative	Methane delivered in the period	Methane delivered cumulative	Methane oxidation efficiency	MD flare, Mass methane destroyed in the period	MD flare, Mass methane destroyed cumulative	Global warming potential methane	Emission reduction	Emission reduction cumulative	PE flare, Project emissions (uncontrolled emissions to atmosphere from flare)	PE flare, Project emissions cumulative (uncontrolled emissions to atmosphere from flare)
mm/dd/yy	mm/dd/yy	MMBtu HHV	MMBtu HHV	MMBtu HHV	scf	scf	metric tons	metric tons	%	metric tons	metric tons	tons CO2 equivalent per ton methane	CO2 equivalent metric tons	CO2 equivalent metric tons	CO2 equivalent metric tons	CO2 equivalent metric tons
1-Jan-09																
1-Jan-09	31-Jan-09	2,757	-	2,757	2,724,240	2,724,240	51	51	50%	26	26	21	539	539	539	539
1-Feb-09	28-Feb-09	2,757	2,757	-	-	2,724,240	0	51	50%	-	26	21	-	539	-	539
1-Mar-09	31-Mar-09	2,757	2,757	-	-	2,724,240	0	51	50%	-	26	21	-	539	-	539
1-Apr-09	30-Apr-09	7,088	2,757	4,331	4,279,807	7,004,046	81	132	50%	40	66	21	847	1,386	847	1,386
1-May-09	31-May-09	9,855	7,088	2,767	2,733,738	9,737,784	52	184	50%	26	92	21	541	1,927	541	1,927
1-Jun-09	30-Jun-09	9,855	9,855	-	-	9,737,784	0	184	50%	-	92	21	-	1,927	-	1,927

EXHIBIT 4

Emission Reductions from the Greater New Bedford LFG Utilization Project using ACM0001 (Version 9.1) under the VCS Program

Key factors to determine baseline and emission reductions (1):								
Methane oxidation efficiency for electric generation:								100%
Methane oxidation efficiency for flare:								50%
GWP methane, Global warming potential for methane:								21
Quantity methane collected and controlled to make electricity								100%
Quantity methane collected and controlled by flare								0%
EL lfg	Indirect electricity required by baseline activity							0
ET lfg	Indirect thermal energy required by baseline activity							0
PE	Project emissions, which are indirect emissions from Project Activity							0
MD project	Methane destroyed by Project Activity							See below
MD bl	Methane destroyed in the District Initial System.							See below
MD flared	Methane destroyed by flaring = methane delivered to flare - methane emitted to atmosphere							See below
MD electricity	Methane destroyed by generation of electricity							See below
BE	Baseline emissions = (MD project-MD bl) * GWP methane + indirect emissions of baseline activity							See below
ER	Emission reductions, which is equal to BE - PE							See below
	Methane collected and delivered to engines and flare,	MD electricity,	MD flared,	MD project,	MD bl (2),	(MD project MD bl)	BE,	ER,
Year	methane metric tons	methane metric tons	methane metric tons	methane metric tons	methane metric tons	methane metric tons	CO2e metric tons	CO2e metric tons
1st Half 2009	2,904	2,904	92	2,996	305	2,691	56,520	56,520
(1) Key factors and equations are from UNFCCC CDM document ACM0001/Version 09.1.								
(2) Calculation of MD bl in accordance with validation report shown below.								
Year	Methane delivered to flare from District Initial System, metric tons	MD bl, Methane destroyed in the District Initial System, metric tons						
2001	3,548	1,774						
2002	3,104	1,552						
2003	2,716	1,358						
2004	2,377	1,188						
2005	2,080	1,040						
2006	1,820	910						
2007	1,592	796						
2008	1,393	697						
2009	1,219	610						
2010	1,067	533						
2011	933	467						
2012	817	408						
2013	715	357						
2014	625	313						
2015	547	274						
2016	479	239						
Annual rate of decline =	0.125							