

Commonwealth of Massachusetts
Executive Office of Environmental
Affairs ■ MEPA Office

ENF Environmental
Notification Form

| | |
|--|----------------|
| <i>For Office Use Only</i> | |
| <i>Executive Office of Environmental Affairs</i> | |
| EOEA No.: | 13176 |
| MEPA Analyst: | Arthur Pugsley |
| Phone: | 617-626-1029 |

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

| | | |
|--|--|------------------------------|
| Project Name: Greater New Bedford LFG Utilization Project | | |
| Street: 300 Samuel Barnet Blvd. New Bedford, MA 02745 | | |
| Municipality: Dartmouth | Watershed: Buzzards Bay | |
| Universal Transverse Mercator Coordinates: N 4,620.55 km and E 335.31 km | Latitude: 41° 43' 17.8" | Longitude: 70° 58' 47.6" |
| Estimated commencement date: June 2004 | Estimated completion date: November 2004 | |
| Approximate cost: \$4 million | Status of project design: | 10 % complete |
| Proponent: CommonWealth New Bedford Energy LLC | | |
| Street: 199 Corey Street | | |
| Municipality: Boston | State: MA | Zip Code: 02132 |
| Name of Contact Person From Whom Copies of this ENF May Be Obtained: Thomas Yeransian | | |
| Firm/Agency: CommonWealth Resource Management Corporation | Street: 7 Winslow Way | |
| Municipality: Mansfield | State: MA | Zip Code: 02048 |
| Phone: 508-339-3074 | Fax: 508-339-1326 | E-mail: tyeransian@crmcx.com |

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes No

Has this project been filed with MEPA before? Landfill gas (LFG) emissions control was a component of the MEPA review for development of the Crapo Hill Landfill. Energy recovered as proposed for the Project was identified as a final mitigation measure to control LFG emissions generated from the landfill.

Yes (EOEA No. 4060) No

Has any project on this site been filed with MEPA before? Same as above.

Yes (EOEA No. 4060) No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

| | | |
|---|------------------------------|--|
| a Single EIR? (see 301 CMR 11.06(8)) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Special Review Procedure? (see 301 CMR 11.09) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Phase I Waiver? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): The Project will receive assistance from the Massachusetts Technology Collaborative Renewable Energy Trust (MTC) as follows:

- (1) Renewable Energy Certificate Option Award valued at up to \$2,992,990, pursuant to the MTC's Massachusetts Green Power Partnership program,
 (2) Approval of a loan of up to \$150,000 under the MTC's Pre-development Financing Program

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:

Non-major Comprehensive Plan Approval – DEP, Air

Major modification to LFG collection system – DEP, Solid Waste

Order of Conditions - Dartmouth Conservation Commission

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input checked="" type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

| Summary of Project Size & Environmental Impacts | Existing | Change | Total | State Permits & Approvals |
|--|---|---|-------|--|
| LAND | | | | <input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> |
| Total site acreage | 2.3 acres of a 152-acre site assigned landfill. | | | |
| New acres of land altered | | Up to 0.5-acres of land disturbed during development of landfill. | | |
| Acres of impervious area | 0 | 0.2 | 0.2 | |
| Square feet of new bordering vegetated wetlands alteration | | 0 | | |
| Square feet of new other wetland alteration | | 0 | | |
| Acres of new non-water dependent use of tidelands or waterways | | 0 | | |
| STRUCTURES | | | | |
| Gross square footage | 0 | 8,000 | 8,000 | |
| Number of housing units | NA | | | |
| Maximum height (in feet) | 0 | 15 | 15 | |

| TRANSPORTATION | | | |
|---|---|------|------|
| Vehicle trips per day | 0 | 10 | 10 |
| Parking spaces | 0 | 5 | 5 |
| WATER/WASTEWATER | | | |
| Gallons/day (GPD) of water use | 0 | <500 | <500 |
| GPD water withdrawal | 0 | <500 | <500 |
| GPD wastewater generation/ treatment | 0 | <500 | <500 |
| Length of water/sewer mains (in miles) | 0 | <0.2 | <0.2 |

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative *(You may attach one additional page, if necessary.)*

Commonwealth New Bedford Energy LLC (CNBE) will own, construct and operate a facility that houses up to five internal combustion engine-generator sets to generate up to 4.3 MW electricity from the combustion of landfill gas (LFG), as well as the potential for installation of additional heat recovery equipment (the Project). The Project will initially install and operate four of the five engine-generator sets to match the existing LFG quantities. A fifth engine may be installed once LFG quantities increase to match the capacity of an additional engine. The Project will utilize LFG currently being flared at the Crapo Hill Landfill. LFG in excess of the capacity of the engines will continue to be flared.

The engine-generator sets will be housed in a building, and each unit will be equipped with an exhaust stack with silencers to comply with applicable noise standards. The engines will be cooled by a jacket water system, with heat expelled to the atmosphere through air-cooled radiators. Each engine will produce shaft power to drive an integral electric generator, which will generate electricity for in-house use and for delivery to the local power grid. Additional equipment will be added to recovery heat at a later date if found to be feasible.

The Project will have no regular process water use. Water use will be limited to employee sanitary use. Water supply will be provided by via connection to the on-site water service. Sanitary waste water will be discharged to the on-site sewer system.

The Project will be installed at a remote site (the Site) on the property of the Crapo Hill Landfill (Landfill) in Dartmouth, Massachusetts. The Landfill is owned and operated by the Greater New Bedford Regional Refuse Management District (District). CNBE will install the Project on less than 0.5 acres of previously disturbed area that will be on a 2.3-acre parcel of land leased to CNBE by the District. The Project will be installed adjacent to and interconnect with the existing flare. The Site is surrounded by the Landfill mound itself to the north and west, and by buffer areas owned by the District to the south and east. The nearest property line to the Site is the border with the City of New Bedford water main easement, and which is approximately 600 feet to the southeast across a wooded area. The New Bedford Business Park lies beyond the water main easement further southeast from the Site. The nearest resident to the Site is located approximately 1,400 feet to the north. The Project will not be visible to any of the abutters to the Landfill.

The Project is consistent with the commitment made by the District in the course of the MEPA process for the Landfill (EOEA No. 4060) at the original time of its development to mitigate potential impacts of LFG emissions by collecting and combusting LFG and by utilizing the recovered LFG as an energy resource. With the implementation of the Project, CNBE will have implemented the final phase of the mitigation measures on behalf of the District and consistent with the commitments made by the District during the MEPA process for the Landfill.

The Project will act as a pollution control device to destroy the volatile organic compounds (VOCs) and methane that are present in LFG. Combustion of the LFG will, however, create

some secondary emissions of NOx and CO. The Project will acquire permits from the MDEP Air and Solid Waste Divisions that address the control of the destruction of methane and VOC content of the LFG, and that specify limits on NOx and CO emissions using BACT standards established under the MDEP policy for permitting of LFG-to-energy projects. The MDEP policy specifically states that

“the MDEP has determined that these LFG-to-energy projects have an overall environmental benefit, because of their ability to use and destroy, through the production of electricity by internal combustion engines, otherwise uncontrolled LFG, including methane, a potent greenhouse gas; VOCs; and other toxic air emissions. In support of this determination, the DEP entered into a Memorandum of Understanding with the U.S. Environmental Protection Agency and the Massachusetts Division of Energy Resources, the purpose of which is to promote LFG-to-energy projects in Massachusetts.” (MDEP Policy COM-96.001)