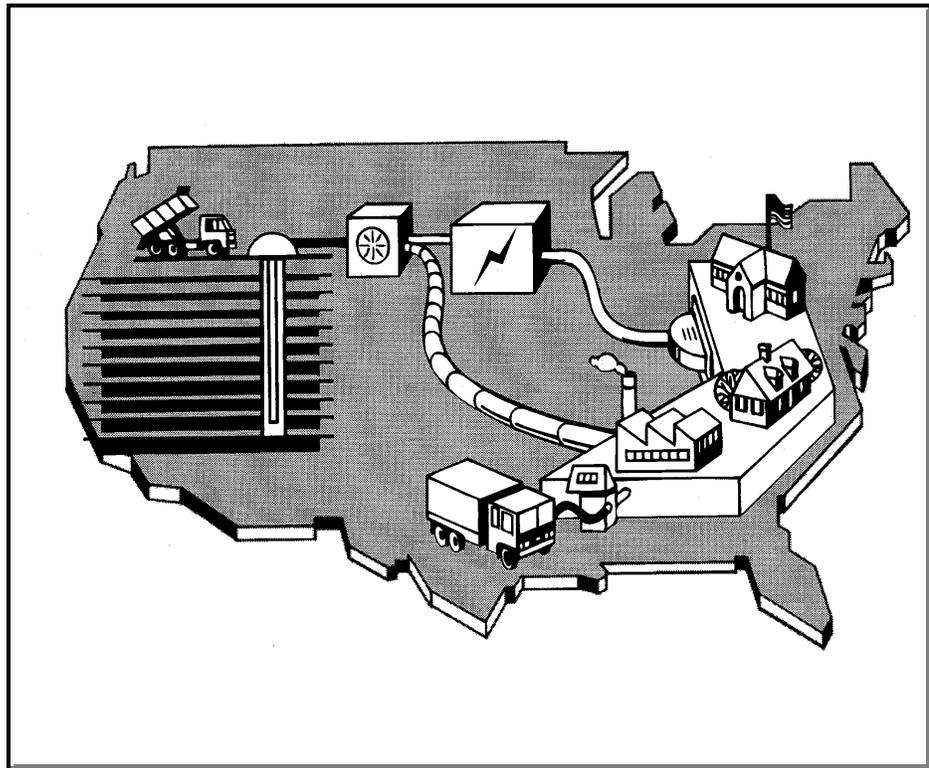




# Landfill Gas-to-Energy Project Opportunities

## Landfill Profiles for the State of Massachusetts



## EPA Landfill Methane Outreach Program



The EPA Landfill Methane Outreach Program, a key component of the United State's *Climate Change Action Plan*, encourages the use of landfill gas (LFG) as an energy resource. EPA assists utilities, municipal and private landfill owners and operators, tribes, and state agencies in reducing methane emissions from landfills through the development of profitable landfill energy recovery projects. Methane captured from landfills can be transformed into a cost-effective fuel source for electricity, heat, boiler and vehicular fuel, or sale to a pipeline. EPA estimates there are approximately 200 landfill methane recovery projects in the U.S. and that up to 750 landfills could install economically viable landfill energy projects.

The Landfill Methane Outreach Program includes five important components: the State Ally, Energy Ally, Industry Ally, Community Partner, and Endorser programs. EPA establishes separate alliances with state agencies, energy providers (including investor-owned, municipal and other public power utilities and cooperatives), key trade and public sector associations, members of the landfill gas development industry (including developers, engineers, equipment vendors, and others) and local communities, municipalities and landfill owner/operators through a Memorandum of Understanding (MOU). By signing the MOU, each Ally/Partner acknowledges a shared commitment to the promotion of landfill gas-to-energy recovery at solid waste landfills, recognizes that the widespread use of landfill gas will reduce emissions of methane and other gases, and commits to undertake activities to enhance development of this resource. In return, EPA agrees to provide landfill gas-to-energy project assistance and public recognition of the Allies' and Partners' participation in the program.

## Introduction

Since 1994 the U.S. EPA's Landfill Methane Outreach Program (LMOP) has participated in an ongoing effort to gather information on Municipal Solid Waste landfills (MSW). A key component of the LMOP is to provide MSW landfill owners and operators, project developers, utilities, and other potential project participants with information on MSW landfills that may offer attractive energy development opportunities. This document presents state specific landfill information, hereinafter referred to as the landfill profiles. These profiles are useful to evaluate the potential for developing landfill gas-to-energy projects (LFGTE). EPA assembled this information from state and local sources as well as various national solid waste publications, landfill owners and operators, and project developers.

The EPA has prepared a separate document to describe the methodology used to develop the state-specific landfill profiles and estimate the benefits of using LFGTE as an energy source. The document, *Landfill Gas-to-Energy Project Opportunities, Background Information on Landfill Profiles*, contains background information on gas collection and use, describes the data fields according to the five sections listed on the landfill profiles, and where applicable, illustrates calculations and default values used to derive estimates. EPA strongly recommends that users read the document prior to using the landfill profiles. Users can obtain the document by calling the LMOP hotline at 1-888-STAR-YES.

### Data Sources

- EPA-ORD Landfill Gas Utilization-Survey (Thorneloe, 1997)
- Directory and Atlas of Solid Waste Disposal Facilities (SWA, 1994)
- Implementation Guide for Landfill Gas Recovery Projects in the Northeast (SCS, 1994)
- Landfill Gas-to-Energy 1994-1995 Activity Report (SWT, 1994)
- Methane Recovery from Landfill Yearbook (GAA, 1994)
- Project developers, landfill owners, and operators
- State and local records
- Survey of Landfill Gas Generation Potential (EPRI, 1992)
- U.S. Landfill Directory (SWANA, 1992)

## Landfill Classification

To facilitate the use of available landfill information, EPA has categorized the landfills into five categories: Current Project,<sup>1</sup> Candidate Project, Shutdown, Other, and Unknown waste-in-place (WIP). These categories are based on the status of the landfill's LFGTE project(s) and WIP. The generation of methane is a function of many factors, the most critical being the amount of waste-in-place and the number of years the waste has been in the landfill. Peak methane generation occurs soon after closure; therefore, the longer the landfill has been closed, the less attractive it becomes for methane recovery. Based on the general timing of peak methane generation, EPA assumes that landfills that ceased accepting waste prior to 1993 have a low probability of generating enough methane to make a gas recovery project economical. Consequently, landfills need to be operating in 1993 to be considered as having a Candidate Project.

### Landfill Categorizes

#### Current Project:

- Landfill with operational LFGTE project or landfill with LFGTE project under construction.

#### Candidate Project:

- Landfill with a potential or planned LFGTE utilization project; or
- Landfill is currently operating or closed after 1993; and has more than 1,000,000 tons of municipal solid waste-in-place.<sup>2</sup>

#### Shutdown:

- Landfill with shutdown LFGTE project.

#### Other:

- Landfill has less than 1,000,000 tons of municipal solid waste-in-place with no current or planned LFGTE project.

#### Unknown WIP:

- Landfill with insufficient data to determine the waste-in-place.

## State Summary

State-specific landfill profile information is summarized in three exhibits. Exhibit 1 presents a summary of the state-specific potential for LFG utilization energy by landfill category. Exhibit 2 summarizes the emissions avoided by fossil fuel displacement for electricity generation and direct use projects. Exhibit 3 presents an index of the state-specific MSW landfills, referenced by category, landfill name and general characteristics.

<sup>1</sup> Current projects illustrate the wide range of successful project development options.

<sup>2</sup> By modeling the relationship between WIP and methane generation, a cut-off of 1,000,000 tons of WIP was established; landfills having at least 1,000,000 tons of WIP are considered candidate landfills.



## Exhibit 1: Massachusetts MSW Landfill Summary

| Category    | No. of Landfills | Est. Capacity Potential |                         | Est. CH4 Generation (mmscf/d) | Methane Reduction (tons/yr) |         | CO2 Equivalent of CH4 Reduction (tons/yr) |           |
|-------------|------------------|-------------------------|-------------------------|-------------------------------|-----------------------------|---------|---|-----------|
|             |                  | Electricity (MW)        | Gas Capacity (mmBtu/hr) |                               | Potential                   | Current | Potential                                 | Current   |
|             |                  |                         |                         |                               |                             |         |   |           |
| Candidate   | 8                | 21                      | 205                     | 7                             | 37,877                      | 15,418  | 795,415                                   | 323,770   |
| Other       | 7                | 4                       | 41                      | 1                             | 7,665                       | 0       | 160,961                                   | 0         |
| Unknown WIP | 6                |                         |                         |                               |                             |         |   |           |
| Total       | 36               | 55                      | 550                     | 18                            | 101,804                     | 57,431  | 2,137,888                                 | 1,206,041 |

## Exhibit 2: Potential Massachusetts Emissions Avoided by Fossil Fuel Displacement

| Category    | Electricity Generation Project |         |             |               |       |             | Direct Use Project |         |             |               |       |             |
|-------------|--------------------------------|---------|-------------|---------------|-------|-------------|--------------------|---------|-------------|---------------|-------|-------------|
|             | CO2 (tons/yr)                  |         |             | SO2 (tons/yr) |       |             | CO2 (tons/yr)      |         |             | SO2 (tons/yr) |       |             |
|             | Coal                           | Oil     | Natural Gas | Coal          | Oil   | Natural Gas | Coal               | Oil     | Natural Gas | Coal          | Oil   | Natural Gas |
| Current     | 240,729                        | 197,580 | 132,855     | 1,522         | 1,272 | 0           | 169,427            | 139,058 | 93,504      | 1,542         | 810   | 1           |
| Candidate   | 161,802                        | 132,800 | 89,296      | 1,023         | 855   | 0           | 114,061            | 93,616  | 62,949      | 1,038         | 546   | 1           |
| Other       | 33,150                         | 27,208  | 18,295      | 209           | 175   | 0           | 23,082             | 18,945  | 12,739      | 210           | 110   | 0           |
| Unknown WIP |                                |         |             |               |       |             |                    |         |             |               |       |             |
| Total       | 435,681                        | 357,587 | 240,446     | 2,754         | 2,302 | 0           | 306,570            | 251,619 | 169,192     | 2,790         | 1,466 | 1           |

### Exhibit 3: Index of Landfills in Massachusetts

| Category    | Landfill Name                     | WIP                                 |                                     |                                     | Landfill Operating in 1998          | LFG Collected                       | LFG Utilization Project             | Status of LFGTE Project |
|-------------|-----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------|
|             |                                   | <2.5 million tons                   | 2.5 to 4 million tons               | >4 million tons                     |                                     |                                     |                                     |                         |
| Current     | Achusnet LF                       | <input type="checkbox"/>            | Construction            |
| Current     | Agawam LF-Bondi's Island          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | Attleboro LF                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Construction            |
| Current     | Barre                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Operational             |
| Current     | BFI-Ahearn LF                     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | BFI-Halifax LF                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | Fitchburg-Westminster LF          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Operational             |
| Current     | Glendale Road LF                  | <input type="checkbox"/>            | Construction            |
| Current     | Greenwood Street LF               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Construction            |
| Current     | Lowell LF                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | Northern Disposal Incorporated LF | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | Plainville LF                     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Current     | Randolph LF                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Construction            |
| Current     | Taunton LF                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Operational             |
| Current     | United Waste LF #1                | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Operational             |
| Candidate   | BFI Fall River LF                 | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Planned                 |
| Candidate   | Bourne LF                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | Potential               |
| Candidate   | Braintree LF                      | <input type="checkbox"/>            | Planned                 |
| Candidate   | Granby-Holyoke LF                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Potential               |
| Candidate   | New Bedford LF                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Candidate   | Northampton LF                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Planned                 |
| Candidate   | South Meadow Road LF              | <input type="checkbox"/>            | Planned                 |
| Candidate   | United Waste LF #2                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Planned                 |
| Other       | Amherst LF                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | Chatham LF                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | Crapo Hill LF                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | Dartmouth LF                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | Marshfield LF                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | Nantucket LF                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Other       | RCI Hudson/Stow LF                | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | Billerica Landfill                | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | GCR LF                            | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | Leicester LF                      | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | Marion LF                         | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | Otis Air Force Base LF            | <input type="checkbox"/>            | Unknown                 |
| Unknown WIP | Palmer LF                         | <input type="checkbox"/>            | Unknown                 |

**A. GENERAL LANDFILL INFORMATION**

|                            |                  |                                       |      |
|----------------------------|------------------|---------------------------------------|------|
| Landfill Owner:            | City of Achusnet | Annual Acceptance Rate (tons):        |      |
| Landfill Owner Type:       | Public           | Year Annual Acceptance Rate Reported: | 1998 |
| Alternative Landfill Name: |                  | Design Capacity (tons):               |      |
| City:                      | Achusnet         | Acres Currently Landfilled (acres):   |      |
| County:                    |                  | Average Depth (feet):                 |      |
| State:                     | MA               | 1998 Waste-in-Place (tons):           |      |
| Year Open:                 |                  | 1998 Waste-in-Place (tons):           |      |
| Year Closed:               |                  |                                       |      |

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):  
 LFG Collection System Status:  
 Current LFG Collected (mmscf/d):  
 Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:  
 Utilization System Status: Construction  
 Utilization System Type: Reciprocating Engine  
 Utilization System Start Year: 1998  
 Electric Utility Provider(s):  
 Natural Gas Provider(s):  
 Energy Purchaser(s):

|                               |                                     |    |                               |
|-------------------------------|-------------------------------------|----|-------------------------------|
| Capacity:                     | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity: |                                     |    |                               |
| Current Capacity:             |                                     |    |                               |
| Planned Capacity:             | 1.2                                 |    |                               |

Utilities in County:

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|  | Potential  | Current  |
|--|--|--|
| Methane Reduction (tons/yr):<br>CO2 Equivalent of CH4 Reduction (tons/yr): |  |  |
| Emissions Avoided by Fossil Fuel Displacement:                             | Electricity Generation Project<br>CO2 (tons/yr)      SO2 (tons/yr) | Direct Use Project<br>CO2 (tons/yr)      SO2 (tons/yr) |
| Coal:  |  |  |
| Fuel Oil:  |  |  |
| Natural Gas:   |  |  |

**E. CONTACT INFORMATION**

|                  | Landfill Owner | Landfill Operator |
|------------------|----------------|-------------------|
| Contact Name:    |                |                   |
| Mailing Address: |                |                   |
| Phone Number:    |                | 401-941-7900      |
| Fax Number:      |                |                   |

\* Italicized indicates values estimated by EPA.

**A. GENERAL LANDFILL INFORMATION**

|                            |                     |                                       |           |
|----------------------------|---------------------|---------------------------------------|-----------|
| Landfill Owner:            | City of Springfield | Annual Acceptance Rate (tons):        |           |
| Landfill Owner Type:       | Public              | Year Annual Acceptance Rate Reported: |           |
| Alternative Landfill Name: |                     | Design Capacity (tons):               |           |
| City:                      | Springfield         | Acres Currently Landfilled (acres):   | 68        |
| County:                    | Hampden             | Average Depth (feet):                 | 50        |
| State:                     | MA                  | 1994 Waste-in-Place (tons):           | 1,000,000 |
| Year Open:                 | 1968                | 1998 Waste-in-Place (tons):           | 1,000,000 |
| Year Closed:               | 1992                |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.67        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 0.6         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Operational                         |    |                               |
| Utilization System Type:       | Boiler                              |    |                               |
| Utilization System Start Year: | 1994                                |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           | Springfield Resource Recovery       |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 2                                   |    | 21                            |
| Current Capacity:              |                                     |    | 13                            |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Chester Muni Light Dept; Chicopee Electric Light Dept; Holyoke Gas & Elec Dept; Massachusetts E

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 3,895                                 |                      | 2,313                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 81,803                                |                      | 48,565                    |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 16,575                                | 105                  | 11,731                    | 107                  |
| <i>Fuel Oil:</i>                                      | 13,604                                | 88                   | 9,628                     | 56                   |
| <i>Natural Gas:</i>                                   | 9,147                                 | 0                    | 6,474                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                               | Landfill Operator             |
|------------------|--|-------------------------------|
| Contact Name:    | Mike Triggs, DPW Deputy Director             | John Foley, Project Manager   |
| Mailing Address: | 1600 East Columbus Avenue<br>DPW-Solid Waste | Bondis Island<br>P.O. Box 608 |
| Phone Number:    | 413-787-6542                                 | 413-785-5120                  |
| Fax Number:      |  |                               |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |                                  |                                       |        |
|----------------------------|----------------------------------|---------------------------------------|--------|
| Landfill Owner:            | Attleboro Landfill, Incorporated | Annual Acceptance Rate (tons):        | 57,200 |
| Landfill Owner Type:       | Private                          | Year Annual Acceptance Rate Reported: |        |
| Alternative Landfill Name: |                                  | Design Capacity (tons):               |        |
| City:                      | Attleboro                        | Acres Currently Landfilled (acres):   |        |
| County:                    | Bristol                          | Average Depth (feet):                 |        |
| State:                     | MA                               | Waste-in-Place (tons):                |        |
| Year Open:                 |                                  | 1998 Waste-in-Place (tons):           |        |
| Year Closed:               | 1994                             |                                       |        |

**B. LANDFILL GAS COLLECTION***Estimated Methane Generation (mmscf/d):*

LFG Collection System Status: Operational

Current LFG Collected (mmscf/d):

Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

|                                |                      |
|--------------------------------|----------------------|
| Utilization System Status:     | Construction         |
| Utilization System Type:       | Reciprocating Engine |
| Utilization System Start Year: | 1997                 |
| Electric Utility Provider(s):  |                      |
| Natural Gas Provider(s):       |                      |
| Energy Purchaser(s):           |                      |

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

*Estimated Potential Capacity:*

Current Capacity:

Planned Capacity:

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Mansfield Muni Elec Dept; Massachus

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                        | Current                                 |
|---|---|---|
| <i>Methane Reduction (tons/yr):</i>                   |   |   |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |   |   |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i>   | <i>Direct Use Project</i>               |
|   | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> |
| <i>Coal:</i>  |   |   |
| <i>Fuel Oil:</i>                                      |   |   |
| <i>Natural Gas:</i>                                   |   |   |

**E. CONTACT INFORMATION**

|                  | Landfill Owner           | Landfill Operator        |
|------------------|--------------------------|--------------------------|
| Contact Name:    | Albert Dumont, President | Albert Dumont, President |
| Mailing Address: | 1 Rathburn/Willard Drive | 1 Rathburn/Willard Drive |
| Phone Number:    | 508-222-7454             | 508-222-7454             |
| Fax Number:      |                          |                          |



**A. GENERAL LANDFILL INFORMATION**

|                            |            |                                       |           |
|----------------------------|------------|---------------------------------------|-----------|
| Landfill Owner:            | BFI        | Annual Acceptance Rate (tons):        | 420,000   |
| Landfill Owner Type:       | Private    | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: |            | Design Capacity (tons):               |           |
| City:                      | Fall River | Acres Currently Landfilled (acres):   |           |
| County:                    | Plymouth   | Average Depth (feet):                 |           |
| State:                     | MA         | 1993 Waste-in-Place (tons):           | 5,400,200 |
| Year Open:                 | 1938       | 1998 Waste-in-Place (tons):           | 7,067,200 |
| Year Closed:               | 1999       |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 1.32        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 4.0         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Planned                             |    |                               |
| Utilization System Type:       | Reciprocating Engine                |    |                               |
| Utilization System Start Year: | 1999                                |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           | Taunton Municipal Light Plant       |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 4                                   |    | 41                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              | 4.4                                 |    | 83                            |

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Hingham Muni Lighting Plant; Hull M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 7,642                                 |                      | 15,418                    |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 160,484                               |                      | 323,770                   |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 32,360                                | 205                  | 23,013                    | 209                  |
| <i>Fuel Oil:</i>                                      | 26,560                                | 171                  | 18,888                    | 110                  |
| <i>Natural Gas:</i>                                   | 17,859                                | 0                    | 12,701                    | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner              | Landfill Operator           |
|------------------|-----------------------------|-----------------------------|
| Contact Name:    | Robert Derosa, Site Manager | Robert Derosa, Site Manager |
| Mailing Address: | 1080 Airport Road           | 1080 Airport Road           |
| Phone Number:    | 508-678-8860                | 508-678-8860                |
| Fax Number:      |                             |                             |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |             |                                       |    |
|----------------------------|-------------|---------------------------------------|----|
| Landfill Owner:            | BFI         | Annual Acceptance Rate (tons):        |    |
| Landfill Owner Type:       | Private     | Year Annual Acceptance Rate Reported: |    |
| Alternative Landfill Name: | Chicopee LF | Design Capacity (tons):               |    |
| City:                      | Chicopee    | Acres Currently Landfilled (acres):   | 43 |
| County:                    | Hampden     | Average Depth (feet):                 |    |
| State:                     | MA          | Waste-in-Place (tons):                |    |
| Year Open:                 |             | 1998 Waste-in-Place (tons):           |    |
| Year Closed:               | 1993        |                                       |    |

**B. LANDFILL GAS COLLECTION**

*Estimated Methane Generation (mmscf/d):*

|   |             |
|---|-------------|
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 2.0         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

|                                |                              |  |  |
|--------------------------------|------------------------------|--|--|
| Utilization System Status:     | Operational                  |  |  |
| Utilization System Type:       | Reciprocating Engine         |  |  |
| Utilization System Start Year: | 1993                         |  |  |
| Electric Utility Provider(s):  |                              |  |  |
| Natural Gas Provider(s):       |                              |  |  |
| Energy Purchaser(s):           | Chicopee Electric Light Dept |  |  |

|                                      |                                     |    |                               |
|--------------------------------------|-------------------------------------|----|-------------------------------|
| Capacity:                            | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| <i>Estimated Potential Capacity:</i> |                                     |    |                               |
| Current Capacity:                    | 2.8                                 |    | 42                            |
| Planned Capacity:                    |                                     |    |                               |

Utilities in County: Chester Muni Light Dept; Chicopee Electric Light Dept; Holyoke Gas & Elec Dept; Massachusetts E

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                        | Current                                 |
|---|---|---|
| <i>Methane Reduction (tons/yr):</i>                   |   |   |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |   |   |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i>   | <i>Direct Use Project</i>               |
|   | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> |
| <i>Coal:</i>  |   |   |
| <i>Fuel Oil:</i>                                      |   |   |
| <i>Natural Gas:</i>                                   |   |   |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                                | Landfill Operator |
|------------------|---|-------------------|
| Contact Name:    | Michael Collins, Project Manager              | Gosseness         |
| Mailing Address: | 5600 Niagara Falls Boulevard<br>Niagara Falls | 845 Burnett Road  |
| Phone Number:    |   | 413-592-9411      |
| Fax Number:      |   |                   |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |          |                                       |           |
|----------------------------|----------|---------------------------------------|-----------|
| Landfill Owner:            | BFI      | Annual Acceptance Rate (tons):        |           |
| Landfill Owner Type:       | Private  | Year Annual Acceptance Rate Reported: |           |
| Alternative Landfill Name: |          | Design Capacity (tons):               |           |
| City:                      | Halifax  | Acres Currently Landfilled (acres):   | 44        |
| County:                    | Plymouth | Average Depth (feet):                 |           |
| State:                     | MA       | 1993 Waste-in-Place (tons):           | 2,900,000 |
| Year Open:                 |          | 1998 Waste-in-Place (tons):           | 2,900,000 |
| Year Closed:               | 1993     |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.28        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 1.6         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                      |                                     |    |                               |
|--------------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:                 |                                     |    |                               |
| Utilization System Status:           | Operational                         |    |                               |
| Utilization System Type:             | Reciprocating Engine                |    |                               |
| Utilization System Start Year:       | 1997                                |    |                               |
| Electric Utility Provider(s):        |                                     |    |                               |
| Natural Gas Provider(s):             |                                     |    |                               |
| Energy Purchaser(s):                 | Taunton Municipal Light Plant       |    |                               |
| Capacity:                            | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| <i>Estimated Potential Capacity:</i> | 1                                   |    | 9                             |
| Current Capacity:                    | 3.8                                 |    | 33                            |
| Planned Capacity:                    |                                     |    |                               |

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Hingham Muni Lighting Plant; Hull M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 1,593                                 |                      | 6,167                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 33,451                                |                      | 129,507                   |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 7,104                                 | 45                   | 4,797                     | 44                   |
| <i>Fuel Oil:</i>                                      | 5,830                                 | 38                   | 3,937                     | 23                   |
| <i>Natural Gas:</i>                                   | 3,920                                 | 0                    | 2,647                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                   | Landfill Operator                |
|------------------|----------------------------------|----------------------------------|
| Contact Name:    | Tom Hughes                       | Bob Gones                        |
| Mailing Address: | P.O. Box 486<br>27 Laurel Street | P.O. Box 486<br>27 Laurel Street |
| Phone Number:    | 617-293-5407                     | 617-293-5407                     |
| Fax Number:      |                                  |                                  |



**A. GENERAL LANDFILL INFORMATION**

|                            |       |                                       |      |
|----------------------------|-------|---------------------------------------|------|
| Landfill Owner:            |       | Annual Acceptance Rate (tons):        |      |
| Landfill Owner Type:       |       | Year Annual Acceptance Rate Reported: | 1998 |
| Alternative Landfill Name: |       | Design Capacity (tons):               |      |
| City:                      | Barre | Acres Currently Landfilled (acres):   |      |
| County:                    |       | Average Depth (feet):                 |      |
| State:                     | MA    | 1998 Waste-in-Place (tons):           |      |
| Year Open:                 |       | 1998 Waste-in-Place (tons):           |      |
| Year Closed:               |       |                                       |      |

**B. LANDFILL GAS COLLECTION**

*Estimated Methane Generation (mmscf/d):*

LFG Collection System Status:

Current LFG Collected (mmscf/d):

Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

Utilization System Status: Operational

Utilization System Type: Reciprocating Engine

Utilization System Start Year: 1996

Electric Utility Provider(s):

Natural Gas Provider(s):

Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                                      |     |  |
|--------------------------------------|-----|--|
| <i>Estimated Potential Capacity:</i> |     |  |
| Current Capacity:                    | 1.2 |  |
| Planned Capacity:                    |     |  |

Utilities in County:

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      | Current                            |
|---|---------------------------------------|------------------------------------|
| <i>Methane Reduction (tons/yr):</i>                   |                                       |                                    |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |                                       |                                    |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> | <i>Direct Use Project</i>          |
|   | <i>CO2 (tons/yr) SO2 (tons/yr)</i>    | <i>CO2 (tons/yr) SO2 (tons/yr)</i> |
| <i>Coal:</i>  |                                       |                                    |
| <i>Fuel Oil:</i>                                      |                                       |                                    |
| <i>Natural Gas:</i>                                   |                                       |                                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner | Landfill Operator |
|------------------|----------------|-------------------|
| Contact Name:    |                |                   |
| Mailing Address: |                |                   |
| Phone Number:    |                | 508-355-6821      |
| Fax Number:      |                |                   |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                |                                       |           |
|----------------------------|----------------|---------------------------------------|-----------|
| Landfill Owner:            | Town of Bourne | Annual Acceptance Rate (tons):        |           |
| Landfill Owner Type:       | Public         | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: |                | Design Capacity (tons):               |           |
| City:                      | Bourne         | Acres Currently Landfilled (acres):   | 25        |
| County:                    | Barnstable     | Average Depth (feet):                 |           |
| State:                     | MA             | Waste-in-Place (tons):                |           |
| Year Open:                 | 1968           | 1998 Waste-in-Place (tons):           | 1,131,500 |
| Year Closed:               | 2012           |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |      |
|---|------|
| Estimated Methane Generation (mmscf/d):                 | 0.71 |
| LFG Collection System Status:                           |      |
| Current LFG Collected (mmscf/d):                        |      |
| Collection and Treatment System Required Under NSPS/EG: | No   |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Potential                           |    |                               |
| Utilization System Type:       | Unknown                             |    |                               |
| Utilization System Start Year: |                                     |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           |                                     |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 2                                   |    | 22                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Commonwealth Electric Company

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   |                                       | 4,090                |                           | 0                    |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |                                       | 85,888               |                           | 0                    |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 17,364                                | 110                  | 12,316                    | 112                  |
| <i>Fuel Oil:</i>                                      | 14,252                                | 92                   | 10,109                    | 59                   |
| <i>Natural Gas:</i>                                   | 9,583                                 | 0                    | 6,797                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner            | Landfill Operator                    |
|------------------|---------------------------|--------------------------------------|
| Contact Name:    | Robert Paraday, BOS Chair | Cornelius Andres, DPW Superintendent |
| Mailing Address: | 24 Perry Avenue           | P.O. Box 290                         |
| Phone Number:    | 508-759-0600              | 508-759-0640                         |
| Fax Number:      |                           |                                      |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                   |                                       |      |
|----------------------------|-------------------|---------------------------------------|------|
| Landfill Owner:            | Town of Braintree | Annual Acceptance Rate (tons):        |      |
| Landfill Owner Type:       | Public            | Year Annual Acceptance Rate Reported: | 1998 |
| Alternative Landfill Name: |                   | Design Capacity (tons):               |      |
| City:                      | Braintree         | Acres Currently Landfilled (acres):   |      |
| County:                    |                   | Average Depth (feet):                 |      |
| State:                     | MA                | 1998 Waste-in-Place (tons):           |      |
| Year Open:                 |                   | 1998 Waste-in-Place (tons):           |      |
| Year Closed:               |                   |                                       |      |

**B. LANDFILL GAS COLLECTION**

*Estimated Methane Generation (mmscf/d):*

LFG Collection System Status:

Current LFG Collected (mmscf/d):

Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

Utilization System Status: Planned

Utilization System Type: Fuel Cell

Utilization System Start Year: 1999

Electric Utility Provider(s):

Natural Gas Provider(s):

Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                                      |  |  |
|--------------------------------------|--|--|
| <i>Estimated Potential Capacity:</i> |  |  |
| Current Capacity:                    |  |  |
| Planned Capacity:                    |  |  |

Utilities in County:

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      | <i>Current</i>                     |
|---|---------------------------------------|------------------------------------|
| <i>Methane Reduction (tons/yr):</i>                   |                                       |                                    |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |                                       |                                    |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> | <i>Direct Use Project</i>          |
|   | <i>CO2 (tons/yr) SO2 (tons/yr)</i>    | <i>CO2 (tons/yr) SO2 (tons/yr)</i> |
| <i>Coal:</i>  |                                       |                                    |
| <i>Fuel Oil:</i>                                      |                                       |                                    |
| <i>Natural Gas:</i>                                   |                                       |                                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner | Landfill Operator |
|------------------|----------------|-------------------|
| Contact Name:    |                |                   |
| Mailing Address: |                |                   |
| Phone Number:    |                |                   |
| Fax Number:      |                |                   |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                      |                                       |           |
|----------------------------|----------------------|---------------------------------------|-----------|
| Landfill Owner:            | United Waste Systems | Annual Acceptance Rate (tons):        | 156,000   |
| Landfill Owner Type:       | Private              | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: |                      | Design Capacity (tons):               |           |
| City:                      | Westminster          | Acres Currently Landfilled (acres):   |           |
| County:                    | Worcester            | Average Depth (feet):                 |           |
| State:                     | MA                   | Waste-in-Place (tons):                | 4,254,300 |
| Year Open:                 | 1970                 | 1998 Waste-in-Place (tons):           | 4,569,434 |
| Year Closed:               | 1998                 |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |      |
|---|------|
| Estimated Methane Generation (mmscf/d):                 | 1.59 |
| LFG Collection System Status:                           |      |
| Current LFG Collected (mmscf/d):                        |      |
| Collection and Treatment System Required Under NSPS/EG: | No   |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Operational                         |    |                               |
| Utilization System Type:       | Medium Btu                          |    |                               |
| Utilization System Start Year: | 1997                                |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           |                                     |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 5                                   |    | 50                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Ashburnham Muni Light Dept; Boylston Municipal Light; Fitchburg Gas & Elec Light Co; Holden M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 9,174                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 192,652                               |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 39,464                                | 249                  | 27,626                    | 251                  |
| <i>Fuel Oil:</i>                                      | 32,390                                | 209                  | 22,674                    | 132                  |
| <i>Natural Gas:</i>                                   | 21,780                                | 0                    | 15,246                    | 0                    |

**E. CONTACT INFORMATION**

| Landfill Owner   |                 | Landfill Operator          |
|------------------|-----------------|----------------------------|
| Contact Name:    |                 | Paul Mahoney               |
| Mailing Address: | 718 Main Street | P.O. Box 550<br>Depot Road |
| Phone Number:    | 508-345-9550    | 508-355-6821               |
| Fax Number:      |                 |                            |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |                     |                                       |      |
|----------------------------|---------------------|---------------------------------------|------|
| Landfill Owner:            | City of Northampton | Annual Acceptance Rate (tons):        |      |
| Landfill Owner Type:       | Public              | Year Annual Acceptance Rate Reported: | 1998 |
| Alternative Landfill Name: |                     | Design Capacity (tons):               |      |
| City:                      | Northampton         | Acres Currently Landfilled (acres):   |      |
| County:                    |                     | Average Depth (feet):                 |      |
| State:                     | MA                  | 1998 Waste-in-Place (tons):           |      |
| Year Open:                 |                     | 1998 Waste-in-Place (tons):           |      |
| Year Closed:               |                     |                                       |      |

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):  
 LFG Collection System Status:  
 Current LFG Collected (mmscf/d):  
 Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:  
 Utilization System Status: Construction  
 Utilization System Type: Reciprocating Engine  
 Utilization System Start Year: 1998  
 Electric Utility Provider(s):  
 Natural Gas Provider(s):  
 Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                               |     |  |
|-------------------------------|-----|--|
| Estimated Potential Capacity: |     |  |
| Current Capacity:             |     |  |
| Planned Capacity:             | 1.2 |  |

Utilities in County:

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|  | Potential                      | Current                     |
|--|--------------------------------|-----------------------------|
| Methane Reduction (tons/yr):                   |                                |                             |
| CO2 Equivalent of CH4 Reduction (tons/yr):     |                                |                             |
| Emissions Avoided by Fossil Fuel Displacement: | Electricity Generation Project | Direct Use Project          |
|  | CO2 (tons/yr) SO2 (tons/yr)    | CO2 (tons/yr) SO2 (tons/yr) |
| Coal:  |                                |                             |
| Fuel Oil:                                      |                                |                             |
| Natural Gas:                                   |                                |                             |

**E. CONTACT INFORMATION**

|                  | Landfill Owner | Landfill Operator |
|------------------|----------------|-------------------|
| Contact Name:    |                | Peter McErlain    |
| Mailing Address: |                |                   |
| Phone Number:    |                | 413-587-1213      |
| Fax Number:      |                |                   |

\* Italicized indicates values estimated by EPA.

**A. GENERAL LANDFILL INFORMATION**

|                            |         |                                       |           |
|----------------------------|---------|---------------------------------------|-----------|
| Landfill Owner:            |         | Annual Acceptance Rate (tons):        | 146,000   |
| Landfill Owner Type:       | Private | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: |         | Design Capacity (tons):               |           |
| City:                      | Granby  | Acres Currently Landfilled (acres):   |           |
| County:                    | Hampden | Average Depth (feet):                 |           |
| State:                     | MA      | 1992 Waste-in-Place (tons):           | 2,995,829 |
| Year Open:                 | 1960    | 1998 Waste-in-Place (tons):           | 3,490,615 |
| Year Closed:               | 1997    |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 1.12        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        |             |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Potential                           |    |                               |
| Utilization System Type:       | Unknown                             |    |                               |
| Utilization System Start Year: |                                     |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           |                                     |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 4                                   |    | 35                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Chester Muni Light Dept; Chicopee Electric Light Dept; Holyoke Gas & Elec Dept; Massachusetts E

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 6,462                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 135,710                               |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 27,625                                | 175                  | 19,461                    | 177                  |
| <i>Fuel Oil:</i>                                      | 22,673                                | 146                  | 15,973                    | 93                   |
| <i>Natural Gas:</i>                                   | 15,246                                | 0                    | 10,740                    | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner        | Landfill Operator     |
|------------------|-----------------------|-----------------------|
| Contact Name:    | Scott Lemay           | John Krzeminski       |
| Mailing Address: | 645 Shawninigan Drive | 645 Shawninigan Drive |
| Phone Number:    | 413-785-1581          | 413-785-1581          |
| Fax Number:      |                       |                       |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |           |                                       |           |
|----------------------------|-----------|---------------------------------------|-----------|
| Landfill Owner:            |           | Annual Acceptance Rate (tons):        |           |
| Landfill Owner Type:       | Public    | Year Annual Acceptance Rate Reported: |           |
| Alternative Landfill Name: |           | Design Capacity (tons):               |           |
| City:                      | Worcester | Acres Currently Landfilled (acres):   | 92        |
| County:                    | Worcester | Average Depth (feet):                 | 85        |
| State:                     | MA        | 1994 Waste-in-Place (tons):           | 2,000,000 |
| Year Open:                 | 1978      | 1998 Waste-in-Place (tons):           | 2,000,000 |
| Year Closed:               | 1985      |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.93        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 0.5         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Construction                        |    |                               |
| Utilization System Type:       | Reciprocating Engine                |    |                               |
| Utilization System Start Year: | 1998                                |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           | New England Power Co                |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 3                                   |    | 29                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              | 1.6                                 |    | 10                            |

Utilities in County: Ashburnham Muni Light Dept; Boylston Municipal Light; Fitchburg Gas & Elec Light Co; Holden M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 5,374                                 |                      | 1,927                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 112,858                               |                      | 40,471                    |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 22,889                                | 145                  | 16,184                    | 147                  |
| <i>Fuel Oil:</i>                                      | 18,786                                | 121                  | 13,283                    | 77                   |
| <i>Natural Gas:</i>                                   | 12,632                                | 0                    | 8,932                     | 0                    |

**E. CONTACT INFORMATION**

| Landfill Owner   |                 | Landfill Operator           |
|------------------|-----------------|-----------------------------|
| Contact Name:    |                 | Robert Fiore, Director, DPW |
| Mailing Address: | 455 Main Street | 20 East Worcester Street    |
| Phone Number:    | 508-799-1000    | 508-799-1430                |
| Fax Number:      |                 |                             |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                    |                                       |           |
|----------------------------|--------------------|---------------------------------------|-----------|
| Landfill Owner:            | City of Lowell     | Annual Acceptance Rate (tons):        | 85,800    |
| Landfill Owner Type:       | Public             | Year Annual Acceptance Rate Reported: |           |
| Alternative Landfill Name: | Westford Street LF | Design Capacity (tons):               |           |
| City:                      | Lowell             | Acres Currently Landfilled (acres):   | 60        |
| County:                    | Middlesex          | Average Depth (feet):                 | 60        |
| State:                     | MA                 | 1994 Waste-in-Place (tons):           | 1,335,800 |
| Year Open:                 | 1953               | 1998 Waste-in-Place (tons):           | 1,335,800 |
| Year Closed:               | 1995               |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.30        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 1.2         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Operational                         |    |                               |
| Utilization System Type:       | Reciprocating Engine                |    |                               |
| Utilization System Start Year: | 1998                                |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           | New England Power Company           |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 1                                   |    | 10                            |
| Current Capacity:              | 1.6                                 |    | 25                            |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Belmont Muni Light Dept; Boston Edison Company; Cambridge Elec Light Co; Concord Muni Light

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 1,755                                 |                      | 4,625                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 36,847                                |                      | 97,131                    |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 7,104                                 | 45                   | 5,284                     | 48                   |
| <i>Fuel Oil:</i>                                      | 5,830                                 | 38                   | 4,337                     | 25                   |
| <i>Natural Gas:</i>                                   | 3,920                                 | 0                    | 2,916                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                   | Landfill Operator          |
|------------------|----------------------------------|----------------------------|
| Contact Name:    | Edward Walsh, Director, DPW      | Paul Mahoney               |
| Mailing Address: | 375 Merrimac Street<br>City Hall | P.O. Box 550<br>Depot Road |
| Phone Number:    | 508-970-4140                     | 508-355-6828               |
| Fax Number:      |                                  |                            |



**A. GENERAL LANDFILL INFORMATION**

|                            |             |                                       |           |
|----------------------------|-------------|---------------------------------------|-----------|
| Landfill Owner:            |             | Annual Acceptance Rate (tons):        | 156,000   |
| Landfill Owner Type:       | Public      | Year Annual Acceptance Rate Reported: | 1994      |
| Alternative Landfill Name: |             | Design Capacity (tons):               |           |
| City:                      | New Bedford | Acres Currently Landfilled (acres):   | 57        |
| County:                    | Bristol     | Average Depth (feet):                 |           |
| State:                     | MA          | 1997 Waste-in-Place (tons):           | 3,300,000 |
| Year Open:                 | 1935        | 1998 Waste-in-Place (tons):           | 3,300,000 |
| Year Closed:               | 1995        |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |      |
|---|------|
| Estimated Methane Generation (mmscf/d):                 | 0.80 |
| LFG Collection System Status:                           |      |
| Current LFG Collected (mmscf/d):                        |      |
| Collection and Treatment System Required Under NSPS/EG: | No   |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Unknown                             |    |                               |
| Utilization System Type:       | Unknown                             |    |                               |
| Utilization System Start Year: |                                     |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           |                                     |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 3                                   |    | 25                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Mansfield Muni Elec Dept; Massachus

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 4,613                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 96,865                                |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 19,732                                | 125                  | 13,890                    | 126                  |
| <i>Fuel Oil:</i>                                      | 16,195                                | 104                  | 11,401                    | 66                   |
| <i>Natural Gas:</i>                                   | 10,890                                | 0                    | 7,666                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner               | Landfill Operator  |
|------------------|------------------------------|--------------------|
| Contact Name:    | Scott Alfonse, Director, DPW | Scott Alfonse      |
| Mailing Address: | 133 William Street           | 133 William Street |
| Phone Number:    | 508-979-1520                 | 508-979-1520       |
| Fax Number:      |                              |                    |

\* *Italicized indicates values estimated by EPA.*



**A. GENERAL LANDFILL INFORMATION**

|                            |                     |                                       |           |
|----------------------------|---------------------|---------------------------------------|-----------|
| Landfill Owner:            | City of Northampton | Annual Acceptance Rate (tons):        | 50,000    |
| Landfill Owner Type:       | Public              | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: |                     | Design Capacity (tons):               |           |
| City:                      | Northampton         | Acres Currently Landfilled (acres):   | 16        |
| County:                    | Hampshire           | Average Depth (feet):                 |           |
| State:                     | MA                  | 1993 Waste-in-Place (tons):           | 1,635,914 |
| Year Open:                 | 1969                | 1998 Waste-in-Place (tons):           | 1,862,438 |
| Year Closed:               | 2002                |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.89        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        |             |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

## Current Utilization:

|                                |              |
|--------------------------------|--------------|
| Utilization System Status:     | Planned      |
| Utilization System Type:       | Cogeneration |
| Utilization System Start Year: |              |
| Electric Utility Provider(s):  |              |
| Natural Gas Provider(s):       |              |
| Energy Purchaser(s):           |              |

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                               |   |    |
|-------------------------------|---|----|
| Estimated Potential Capacity: | 3 | 28 |
| Current Capacity:             |   |    |
| Planned Capacity:             |   |    |

Utilities in County: Massachusetts Electric Company; South Hadley Elec Light Dept; Western Massachusetts Elec Co

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 5,171                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 108,587                               |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 22,100                                | 140                  | 15,571                    | 142                  |
| <i>Fuel Oil:</i>                                      | 18,139                                | 117                  | 12,780                    | 75                   |
| <i>Natural Gas:</i>                                   | 12,197                                | 0                    | 8,594                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                         | Landfill Operator   |
|------------------|--|---------------------|
| Contact Name:    | Peter Macerlain, Board of Health Agent | David Wickles       |
| Mailing Address: | 210 Main Street                        | 157 Prospect Street |
| Phone Number:    | 413-586-6950                           | 413-247-9231        |
| Fax Number:      |  |                     |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                     |                                       |           |
|----------------------------|---------------------|---------------------------------------|-----------|
| Landfill Owner:            | BFI                 | Annual Acceptance Rate (tons):        | 390,000   |
| Landfill Owner Type:       | Private             | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: | East Bridgewater LF | Design Capacity (tons):               |           |
| City:                      | East Bridgewater    | Acres Currently Landfilled (acres):   |           |
| County:                    | Plymouth            | Average Depth (feet):                 |           |
| State:                     | MA                  | 1995 Waste-in-Place (tons):           | 2,970,729 |
| Year Open:                 | 1978                | 1998 Waste-in-Place (tons):           | 3,341,458 |
| Year Closed:               | 1996                |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 1.27        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 4.0         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

## Current Utilization:

|                                |                      |
|--------------------------------|----------------------|
| Utilization System Status:     | Operational          |
| Utilization System Type:       | Reciprocating Engine |
| Utilization System Start Year: | 1997                 |
| Electric Utility Provider(s):  |                      |
| Natural Gas Provider(s):       |                      |
| Energy Purchaser(s):           |                      |

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                               |     |    |
|-------------------------------|-----|----|
| Estimated Potential Capacity: | 4   | 40 |
| Current Capacity:             | 3.8 | 83 |
| Planned Capacity:             |     |    |

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Hingham Muni Lighting Plant; Hull M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 7,358                                 |                      | 15,418                    |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 154,518                               |                      | 323,770                   |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 31,571                                | 200                  | 22,158                    | 202                  |
| <i>Fuel Oil:</i>                                      | 25,912                                | 167                  | 18,186                    | 106                  |
| <i>Natural Gas:</i>                                   | 17,424                                | 0                    | 12,228                    | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner      | Landfill Operator   |
|------------------|---------------------|---------------------|
| Contact Name:    | John Dinapoli       | John Dinapoli       |
| Mailing Address: | 234 Thatcher Street | 234 Thatcher Street |
| Phone Number:    | 508-588-2260        | 508-588-2260        |
| Fax Number:      |                     |                     |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |            |                                       |           |
|----------------------------|------------|---------------------------------------|-----------|
| Landfill Owner:            |            | Annual Acceptance Rate (tons):        | 715,000   |
| Landfill Owner Type:       | Private    | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: | Laidlaw LF | Design Capacity (tons):               |           |
| City:                      | Plainville | Acres Currently Landfilled (acres):   | 100       |
| County:                    | Norfolk    | Average Depth (feet):                 | 125       |
| State:                     | MA         | 1994 Waste-in-Place (tons):           | 7,095,200 |
| Year Open:                 | 1974       | 1998 Waste-in-Place (tons):           | 8,738,000 |
| Year Closed:               | 1997       |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 2.65        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 1           |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |  |    |                               |
|--------------------------------|--|----|-------------------------------|
| Current Utilization:           |  |    |                               |
| Utilization System Status:     | Operational                              |    |                               |
| Utilization System Type:       | Direct Thermal                           |    |                               |
| Utilization System Start Year: | 1997                                     |    |                               |
| Electric Utility Provider(s):  |  |    |                               |
| Natural Gas Provider(s):       |  |    |                               |
| Energy Purchaser(s):           | /Lorusso Corporation New England Power C |    |                               |
| Capacity:                      | Electricity Generation Project (MW)      | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 8  |    | 83                            |
| Current Capacity:              | 3.0                                      |    |                               |
| Planned Capacity:              |  |    |                               |

Utilities in County: Boston Edison Company; Braintree Elec Light Dept; Eastern Edison Company; Massachusetts Electri

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 15,338                                |                      | 3,854                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 322,104                               |                      | 80,942                    |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 65,510                                | 414                  | 46,189                    | 420                  |
| <i>Fuel Oil:</i>                                      | 53,768                                | 346                  | 37,910                    | 221                  |
| <i>Natural Gas:</i>                                   | 36,154                                | 0                    | 25,491                    | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner           | Landfill Operator              |
|------------------|--------------------------|--------------------------------|
| Contact Name:    | Joseph Donze, LF Manager | Joseph Donze, Landfill Manager |
| Mailing Address: | 14 Belcher Street        | 14 Belcher Street              |
| Phone Number:    | 508-699-2267             | 508-699-2267                   |
| Fax Number:      |                          |                                |



**A. GENERAL LANDFILL INFORMATION**

|                            |                       |                                       |           |
|----------------------------|-----------------------|---------------------------------------|-----------|
| Landfill Owner:            | BFI                   | Annual Acceptance Rate (tons):        | 28,314    |
| Landfill Owner Type:       | Private               | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: | Louis Kmito & Sons LF | Design Capacity (tons):               |           |
| City:                      | Boston                | Acres Currently Landfilled (acres):   | 64        |
| County:                    | Norfolk               | Average Depth (feet):                 |           |
| State:                     | MA                    | Waste-in-Place (tons):                | 1,812,096 |
| Year Open:                 | 1932                  | 1998 Waste-in-Place (tons):           | 1,812,096 |
| Year Closed:               | 1995                  |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.27        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 1.5         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                      |                                     |    |                               |
|--------------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:                 |                                     |    |                               |
| Utilization System Status:           | Construction                        |    |                               |
| Utilization System Type:             | Reciprocating Engine                |    |                               |
| Utilization System Start Year:       | 1998                                |    |                               |
| Electric Utility Provider(s):        |                                     |    |                               |
| Natural Gas Provider(s):             |                                     |    |                               |
| Energy Purchaser(s):                 | New England Power Co                |    |                               |
| Capacity:                            | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| <i>Estimated Potential Capacity:</i> | 1                                   |    | 9                             |
| Current Capacity:                    |                                     |    |                               |
| Planned Capacity:                    | 2.6                                 |    | 31                            |

Utilities in County: Boston Edison Company; Braintree Elec Light Dept; Eastern Edison Company; Massachusetts Electri

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 1,587                                 |                      | 5,782                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 33,323                                |                      | 121,414                   |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 7,104                                 | 45                   | 4,779                     | 44                   |
| <i>Fuel Oil:</i>                                      | 5,830                                 | 38                   | 3,922                     | 23                   |
| <i>Natural Gas:</i>                                   | 3,920                                 | 0                    | 2,637                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner | Landfill Operator |
|------------------|----------------|-------------------|
| Contact Name:    | Richard Lamb   | Richard Lamb      |
| Mailing Address: | Box 199        | 100 Hallet Street |
| Phone Number:    | 617-961-2138   | 617-265-0500      |
| Fax Number:      |                |                   |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |                 |                                       |
|----------------------------|-----------------|---------------------------------------|
| Landfill Owner:            | Town of Clinton | Annual Acceptance Rate (tons):        |
| Landfill Owner Type:       | Public          | Year Annual Acceptance Rate Reported: |
| Alternative Landfill Name: | Clinton LF      | Design Capacity (tons):               |
| City:                      | Clinton         | Acres Currently Landfilled (acres):   |
| County:                    | Middlesex       | Average Depth (feet):                 |
| State:                     | MA              | Waste-in-Place (tons):                |
| Year Open:                 |                 | <i>1998 Waste-in-Place (tons):</i>    |
| Year Closed:               | 1988            |                                       |

**B. LANDFILL GAS COLLECTION**

*Estimated Methane Generation (mmscf/d):*

LFG Collection System Status: Planned

Current LFG Collected (mmscf/d):

Collection and Treatment System Required Under NSPS/EG: No

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

Utilization System Status: Planned

Utilization System Type: Reciprocating Engine

Utilization System Start Year:

Electric Utility Provider(s):

Natural Gas Provider(s):

Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

|                                      |   |  |
|--------------------------------------|---|--|
| <i>Estimated Potential Capacity:</i> |   |  |
| Current Capacity:                    |   |  |
| Planned Capacity:                    | 1 |  |

Utilities in County: Belmont Muni Light Dept; Boston Edison Company; Cambridge Elec Light Co; Concord Muni Light

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                        | Current                                 |
|---|---|---|
| <i>Methane Reduction (tons/yr):</i>                   |   |   |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     |   |   |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i>   | <i>Direct Use Project</i>               |
|   | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> | <i>CO2 (tons/yr)      SO2 (tons/yr)</i> |
| <i>Coal:</i>  |   |   |
| <i>Fuel Oil:</i>                                      |   |   |
| <i>Natural Gas:</i>                                   |   |   |

**E. CONTACT INFORMATION**

| Landfill Owner   |                            | Landfill Operator          |
|------------------|----------------------------|----------------------------|
| Contact Name:    | Paul Conger, Director, DPW | Paul Conger, Director, DPW |
| Mailing Address: | 242 Church Street          | 242 Church Street          |
| Phone Number:    | 508-365-4120               | 508-365-4120               |
| Fax Number:      |                            |                            |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |                 |                                       |           |
|----------------------------|-----------------|---------------------------------------|-----------|
| Landfill Owner:            | City of Taunton | Annual Acceptance Rate (tons):        | 14,300    |
| Landfill Owner Type:       | Public          | Year Annual Acceptance Rate Reported: | 1998      |
| Alternative Landfill Name: |                 | Design Capacity (tons):               |           |
| City:                      | Taunton         | Acres Currently Landfilled (acres):   | 40        |
| County:                    | Bristol         | Average Depth (feet):                 | 100       |
| State:                     | MA              | Waste-in-Place (tons):                | 1,611,694 |
| Year Open:                 | 1972            | 1998 Waste-in-Place (tons):           | 2,290,302 |
| Year Closed:               | 2003            |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |      |
|---|------|
| Estimated Methane Generation (mmscf/d):                 | 1.00 |
| LFG Collection System Status:                           |      |
| Current LFG Collected (mmscf/d):                        |      |
| Collection and Treatment System Required Under NSPS/EG: | No   |

**C. LANDFILL GAS UTILIZATION**

|                                |                                       |    |                               |
|--------------------------------|---------------------------------------|----|-------------------------------|
| Current Utilization:           |                                       |    |                               |
| Utilization System Status:     | Operational                           |    |                               |
| Utilization System Type:       | Reciprocating Engine                  |    |                               |
| Utilization System Start Year: | 1998                                  |    |                               |
| Electric Utility Provider(s):  |                                       |    |                               |
| Natural Gas Provider(s):       |                                       |    |                               |
| Energy Purchaser(s):           | Taunton Municipal Light & Power Plant |    |                               |
| Capacity:                      | Electricity Generation Project (MW)   | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 3                                     |    | 31                            |
| Current Capacity:              | 1.3                                   |    |                               |
| Planned Capacity:              |                                       |    |                               |

Utilities in County: Commonwealth Electric Company; Eastern Edison Company; Mansfield Muni Elec Dept; Massachus

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 5,804                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 121,874                               |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 24,468                                | 155                  | 17,477                    | 159                  |
| <i>Fuel Oil:</i>                                      | 20,082                                | 129                  | 14,344                    | 84                   |
| <i>Natural Gas:</i>                                   | 13,503                                | 0                    | 9,645                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                 | Landfill Operator   |
|------------------|--------------------------------|---------------------|
| Contact Name:    | Bill Fitzgerald, Director, DPW | Omer Gendron        |
| Mailing Address: | 15 Summer Street               | 75 Mount Wayte Ave. |
| Phone Number:    | 508-821-1000                   | 508-875-7777        |
| Fax Number:      |                                |                     |

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

|                            |                      |                                       |           |
|----------------------------|----------------------|---------------------------------------|-----------|
| Landfill Owner:            | United Waste Systems | Annual Acceptance Rate (tons):        | 93,600    |
| Landfill Owner Type:       | Private              | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: | Martone RCI LF       | Design Capacity (tons):               |           |
| City:                      | Barre                | Acres Currently Landfilled (acres):   | 40        |
| County:                    | Worcester            | Average Depth (feet):                 | 100       |
| State:                     | MA                   | 1994 Waste-in-Place (tons):           | 1,671,070 |
| Year Open:                 | 1955                 | 1998 Waste-in-Place (tons):           | 1,927,675 |
| Year Closed:               | 1997                 |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 0.76        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        | 0.5         |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

Current Utilization:

|                                |  |
|--------------------------------|--|
| Utilization System Status:     | Operational                              |
| Utilization System Type:       | Reciprocating Engine                     |
| Utilization System Start Year: | 1995                                     |
| Electric Utility Provider(s):  |  |
| Natural Gas Provider(s):       |  |
| Energy Purchaser(s):           | Massachusetts Electric Company; New Engl |

|                                      |                                     |    |                               |
|--------------------------------------|-------------------------------------|----|-------------------------------|
| Capacity:                            | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| <i>Estimated Potential Capacity:</i> | 2                                   |    | 24                            |
| Current Capacity:                    | 1.0                                 |    | 10                            |
| Planned Capacity:                    |                                     |    |                               |

Utilities in County: Ashburnham Muni Light Dept; Boylston Municipal Light; Fitchburg Gas & Elec Light Co; Holden M

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | Current                   |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 4,385                                 |                      | 1,927                     |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 92,083                                |                      | 40,471                    |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 18,943                                | 120                  | 13,205                    | 120                  |
| <i>Fuel Oil:</i>                                      | 15,547                                | 100                  | 10,838                    | 63                   |
| <i>Natural Gas:</i>                                   | 10,454                                | 0                    | 7,287                     | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner                   | Landfill Operator     |
|------------------|----------------------------------|-----------------------|
| Contact Name:    | Paul Mahoney                     | Robert Markt          |
| Mailing Address: | P.O. Box 550<br>199 Depot Street | 645 Shawninigan Drive |
| Phone Number:    | 508-355-6828                     | 413-592-3800          |
| Fax Number:      |                                  | 413-592-2314          |

\* *Italicized indicates values estimated by EPA.*

**A. GENERAL LANDFILL INFORMATION**

|                            |                      |                                       |           |
|----------------------------|----------------------|---------------------------------------|-----------|
| Landfill Owner:            | United Waste Systems | Annual Acceptance Rate (tons):        | 156,000   |
| Landfill Owner Type:       | Private              | Year Annual Acceptance Rate Reported: | 1995      |
| Alternative Landfill Name: | Partyka LF           | Design Capacity (tons):               |           |
| City:                      | Chicopee             | Acres Currently Landfilled (acres):   |           |
| County:                    | Hampden              | Average Depth (feet):                 |           |
| State:                     | MA                   | Waste-in-Place (tons):                | 4,901,700 |
| Year Open:                 | 1967                 | 1998 Waste-in-Place (tons):           | 5,228,480 |
| Year Closed:               | 2000                 |                                       |           |

**B. LANDFILL GAS COLLECTION**

|   |             |
|---|-------------|
| Estimated Methane Generation (mmscf/d):                 | 1.71        |
| LFG Collection System Status:                           | Operational |
| Current LFG Collected (mmscf/d):                        |             |
| Collection and Treatment System Required Under NSPS/EG: | No          |

**C. LANDFILL GAS UTILIZATION**

|                                |                                     |    |                               |
|--------------------------------|-------------------------------------|----|-------------------------------|
| Current Utilization:           |                                     |    |                               |
| Utilization System Status:     | Planned                             |    |                               |
| Utilization System Type:       | Unknown                             |    |                               |
| Utilization System Start Year: |                                     |    |                               |
| Electric Utility Provider(s):  |                                     |    |                               |
| Natural Gas Provider(s):       |                                     |    |                               |
| Energy Purchaser(s):           |                                     |    |                               |
| Capacity:                      | Electricity Generation Project (MW) | OR | Direct Use Project (mmBtu/hr) |
| Estimated Potential Capacity:  | 5                                   |    | 54                            |
| Current Capacity:              |                                     |    |                               |
| Planned Capacity:              |                                     |    |                               |

Utilities in County: Chester Muni Light Dept; Chicopee Electric Light Dept; Holyoke Gas & Elec Dept; Massachusetts E

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

|   | <i>Potential</i>                      |                      | <i>Current</i>            |                      |
|---|---------------------------------------|----------------------|---------------------------|----------------------|
| <i>Methane Reduction (tons/yr):</i>                   | 9,899                                 |                      | 0                         |                      |
| <i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>     | 207,881                               |                      | 0                         |                      |
| <i>Emissions Avoided by Fossil Fuel Displacement:</i> | <i>Electricity Generation Project</i> |                      | <i>Direct Use Project</i> |                      |
|   | <i>CO2 (tons/yr)</i>                  | <i>SO2 (tons/yr)</i> | <i>CO2 (tons/yr)</i>      | <i>SO2 (tons/yr)</i> |
| <i>Coal:</i>  | 42,621                                | 269                  | 29,810                    | 271                  |
| <i>Fuel Oil:</i>                                      | 34,981                                | 225                  | 24,466                    | 143                  |
| <i>Natural Gas:</i>                                   | 23,522                                | 0                    | 16,452                    | 0                    |

**E. CONTACT INFORMATION**

|                  | Landfill Owner        | Landfill Operator     |
|------------------|-----------------------|-----------------------|
| Contact Name:    | Scott Lemay           | John Krzeminski       |
| Mailing Address: | 645 Shawninigan Drive | 645 Shawninigan Drive |
| Phone Number:    | 413-785-1581          | 413-785-1581          |
| Fax Number:      | 413-592-2314          |                       |

\* *Italicized indicates values estimated by EPA.*