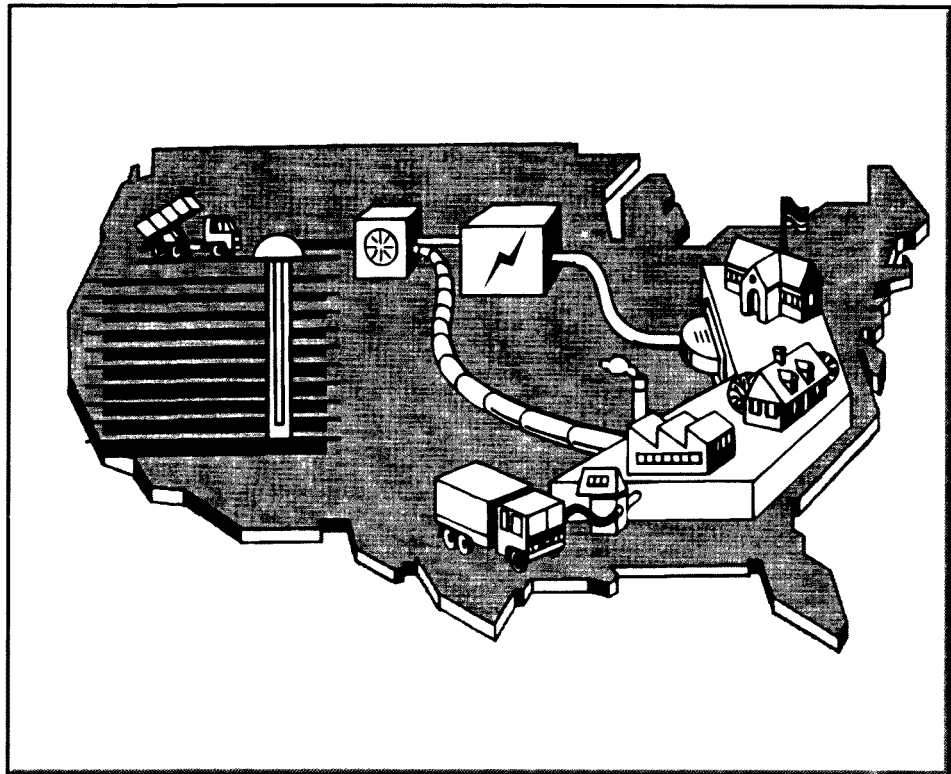




Landfill Gas-to-Energy Project Opportunities

Landfill Profiles for the State of Connecticut



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 (Thomeloe, 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,¹ 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.²

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.

¹ Current projects illustrate the wide range of successful project development options.

² 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: Connecticut 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
Current	3	11	108	3	19,961	10,792	419,183	226,638
Candidate	5	7	74	2	13,686	4,625	287,398	97,131
Other	5	2	15	0	2,731	0	57,351	0
Unknown WIP	11							
Total	24	20	197	6	36,378	15,418	763,932	323,770

Exhibit 2: Potential Connecticut 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	85,242	69,963	47,044	539	450	0	60,110	49,336	33,174	547	288	0
Candidate	58,406	47,937	32,234	369	309	0	41,212	33,825	22,745	375	197	0
Other	12,629	10,365	6,970	80	67	0	8,224	6,750	4,539	75	39	0
Unknown WIP												
Total	156,277	128,265	86,247	988	826	0	109,546	89,911	60,457	997	524	1

Exhibit 3: Index of Landfills in Connecticut

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	Groton LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Current	Hartford LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Construction
Current	New Milford LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Candidate	East Windsor LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Planned
Candidate	Manchester LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Planned
Candidate	New Haven LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Planned
Candidate	Shelton LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shutdown
Candidate	Windsor LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Planned
Other	Bristol LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Canterbury LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Danbury LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Putnam LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Waterbury-North End LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Bridgeport LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	East Hartford LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Ellington LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Hampton LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Killingly LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Meriden LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Montville LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	North Haven LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Torrington LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Wallingford LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Windham LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown

A. GENERAL LANDFILL INFORMATION

Landfill Owner:	Boticello, Inc.	Annual Acceptance Rate (tons):	37,000
Landfill Owner Type:	Private	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Norcap	Design Capacity (tons):	959,808
City:	East Windsor	Acres Currently Landfilled (acres):	45
County:	Hartford	Average Depth (feet):	
State:	CT	1995 Waste-in-Place (tons):	837,000
Year Open:	1976	1998 Waste-in-Place (tons):	948,000
Year Closed:	1999		

B. LANDFILL GAS COLLECTION

Estimated Methane Generation (mmscf/d):	0.66
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:	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	21
Current Capacity:		
Planned Capacity:		

Utilities in County: Connecticut Light & Power Co; Fletcher Electric Light Co Inc

D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential		Current	
Methane Reduction (tons/yr):	3,819		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	80,189		0	
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:	16,575	105	11,499	105
Fuel Oil:	13,604	88	9,438	55
Natural Gas:	9,147	0	6,346	0

E. CONTACT INFORMATION

Landfill Owner

Landfill Operator

Contact Name:	Dennis Boticello	
Mailing Address:	321 Olcott Street	Perret Place
Phone Number:	203-643-8545	203-643-8545
Fax Number:		

* *Italicized indicates values estimated by EPA.*

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A. GENERAL LANDFILL INFORMATION

Landfill Owner:	Town of Groton	Annual Acceptance Rate (tons):	28,886
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	
Alternative Landfill Name:		Design Capacity (tons):	
City:	Groton	Acres Currently Landfilled (acres):	44
County:	New London	Average Depth (feet):	
State:	CT	1995 Waste-in-Place (tons):	2,000,000
Year Open:		1998 Waste-in-Place (tons):	2,000,000
Year Closed:	1993		

B. LANDFILL GAS COLLECTION

Estimated Methane Generation (mmscf/d):	0.19
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:	Operational		
Utilization System Type:	Fuel Cell		
Utilization System Start Year:	1996		
Electric Utility Provider(s):			
Natural Gas Provider(s):			
Energy Purchaser(s):	Northeast Utilities		
Capacity:	Electricity Generation Project (MW)	OR	Direct Use Project (mmBtu/hr)
Estimated Potential Capacity:	1		6
Current Capacity:	0.2		
Planned Capacity:			

Utilities in County:	Bozrah Light & Power Co; Connecticut Light & Power Co; Groton, City of, Dept of Utilities; Jewett C
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D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential		Current	
Methane Reduction (tons/yr):	1,099		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	23,069		0	
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:	4,736	30	3,308	30
Fuel Oil:	3,887	25	2,715	16
Natural Gas:	2,614	0	1,826	0

E. CONTACT INFORMATION

Landfill Owner		Landfill Operator
Contact Name:	Dawn Lemieux	Dawn Lemieux
Mailing Address:	Town Office PO Box	Town Office PO Box
Phone Number:	603-744-8849	203-441-6740
Fax Number:		

* Italicized indicates values estimated by EPA.

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A. GENERAL LANDFILL INFORMATION

Landfill Owner:		Annual Acceptance Rate (tons):	187,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	
City:	Hartford	Acres Currently Landfilled (acres):	87
County:	Hartford	Average Depth (feet):	
State:	CT	1995 Waste-in-Place (tons):	2,187,000
Year Open:	1980	1998 Waste-in-Place (tons):	2,187,000
Year Closed:	1995		

B. LANDFILL GAS COLLECTION

Estimated Methane Generation (mmscf/d):	0.98
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:		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:	3		31
Current Capacity:			
Planned Capacity:			

Utilities in County: Connecticut Light & Power Co

D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential		Current	
Methane Reduction (tons/yr):		5,651		0
CO2 Equivalent of CH4 Reduction (tons/yr):		118,667		0
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:	24,468	155	17,017	155
Fuel Oil:	20,082	129	13,966	81
Natural Gas:	13,503	0	9,391	0

E. CONTACT INFORMATION

Landfill Owner	Landfill Operator
Contact Name:	David Martin
Mailing Address:	179 Allyn Street
Phone Number:	203-549-1751
Fax Number:	

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A. GENERAL LANDFILL INFORMATION

Landfill Owner:	City of Manchester	Annual Acceptance Rate (tons):	30,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	
City:	Manchester	Acres Currently Landfilled (acres):	62
County:	Hartford	Average Depth (feet):	
State:	CT	Waste-in-Place (tons):	
Year Open:		1998 Waste-in-Place (tons):	
Year Closed:	2004		

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: Planned

Utilization System Type: Reciprocating Engine

Utilization System Start Year: 2000

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: Connecticut Light & Power Co; Fletcher Electric Light Co Inc

D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential	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>
	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:	Louise Guarnaccia, Superintendent	
Mailing Address:	41 Center Street	
Phone Number:	203-647-3248	203-647-3248
Fax Number:		



A. GENERAL LANDFILL INFORMATION

Landfill Owner:	City of New Haven	Annual Acceptance Rate (tons):	72,800
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	
Alternative Landfill Name:		Design Capacity (tons):	
City:	New Haven	Acres Currently Landfilled (acres):	24
County:	New Haven	Average Depth (feet):	
State:	CT	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:

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: 2000

Electric Utility Provider(s):

Natural Gas Provider(s):

Energy Purchaser(s): United Illuminating

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

Estimated Potential Capacity:

Current Capacity:

Planned Capacity:

Utilities in County: Connecticut Light & Power Co; United Illuminating Company; Wallingford Electric Div

D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential	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:	Brian Funk, Acting Dir., Public Works	Brian Funk
Mailing Address:	34 Middletown Avenue	34 Middletown Avenue
Phone Number:	203-787-6345	203-946-8101
Fax Number:		

* *Italicized indicates values estimated by EPA.*

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New Milford LF		Landfill Category:	Current
A. GENERAL LANDFILL INFORMATION			
Landfill Owner:		Annual Acceptance Rate (tons):	300,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	New Milford Gas Recovery	Design Capacity (tons):	6,238,752
City:	New Milford	Acres Currently Landfilled (acres):	75
County:	Litchfield	Average Depth (feet):	90
State:	CT	1995 Waste-in-Place (tons):	6,700,000
Year Open:	1987	1998 Waste-in-Place (tons):	7,300,000
Year Closed:	1997		
B. LANDFILL GAS COLLECTION			
Estimated Methane Generation (mmscf/d):	2.29		
LFG Collection System Status:	Operational		
Current LFG Collected (mmscf/d):	2.8		
Collection and Treatment System Required Under NSPS/EG:	No		
C. LANDFILL GAS UTILIZATION			
Current Utilization:			
Utilization System Status:	Operational		
Utilization System Type:	Gas Turbine		
Utilization System Start Year:	1991		
Electric Utility Provider(s):			
Natural Gas Provider(s):			
Energy Purchaser(s):	Connecticut Light & Power Co		
Capacity:	Electricity Generation Project (MW)	OR	Direct Use Project (mmBtu/hr)
Estimated Potential Capacity:	7		71
Current Capacity:	3.3		58
Planned Capacity:			
Utilities in County:	Connecticut Light & Power Co		
D. ENVIROMENTAL BENEFITS OF UTILIZATION			
	Potential		Current
Methane Reduction (tons/yr):	13,212		10,792
CO2 Equivalent of CH4 Reduction (tons/yr):	277,448		226,638
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:	56,039	354	39,786 362
Fuel Oil:	45,994	296	32,654 190
Natural Gas:	30,927	0	21,957 0
E. CONTACT INFORMATION			
	Landfill Owner		Landfill Operator
Contact Name:	Bill Howard, Environmental Engineer		
Mailing Address:	182-2 Danbury Road		
Phone Number:	203-350-2222	203-350-2222	
Fax Number:			

* *Italicized indicates values estimated by EPA.*

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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:	Shelton	Acres Currently Landfilled (acres):	40
County:	Fairfield	Average Depth (feet):	174
State:	CT	1995 Waste-in-Place (tons):	2,000,000
Year Open:	1990	1998 Waste-in-Place (tons):	2,000,000
Year Closed:	1994		

B. LANDFILL GAS COLLECTION

Estimated Methane Generation (mmscf/d):	0.93
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:	Shutdown
Utilization System Type:	Reciprocating Engine
Utilization System Start Year:	1995
Electric Utility Provider(s):	
Natural Gas Provider(s):	
Energy Purchaser(s):	United Illuminating

Capacity:	Electricity Generation Project (MW)	OR	Direct Use Project (mmBtu/hr)
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Estimated Potential Capacity:	3	29
Current Capacity:		
Planned Capacity:	1.7	25

Utilities in County:	Connecticut Light & Power Co; Norwalk Third Taxing District, Electric Dept; South Norwalk Elec W
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D. ENVIROMENTAL BENEFITS OF UTILIZATION

	Potential	Current
Methane Reduction (tons/yr):	5,374	4,625
CO2 Equivalent of CH4 Reduction (tons/yr):	112,858	97,131

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:	22,889	145	16,184	147
Fuel Oil:	18,786	121	13,283	77
Natural Gas:	12,632	0	8,932	0

E. CONTACT INFORMATION

	Landfill Owner	Landfill Operator
Contact Name:	Carlo Berardinelli	
Mailing Address:	1410 Honeyspot Road	179 Allyn Street
Phone Number:	203-386-9755	860-549-6390
Fax Number:		

* Italicized indicates values estimated by EPA.

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Windsor LF		Landfill Category: Candidate	
A. GENERAL LANDFILL INFORMATION			
Landfill Owner:	Town of Windsor	Annual Acceptance Rate (tons):	34,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Windsor-Bloomfield LF	Design Capacity (tons):	
City:	Windsor	Acres Currently Landfilled (acres):	69
County:	Hartford	Average Depth (feet):	
State:	CT	1994 Waste-in-Place (tons):	1,268,000
Year Open:	1973	1998 Waste-in-Place (tons):	1,404,000
Year Closed:	2004		
B. LANDFILL GAS COLLECTION			
Estimated Methane Generation (mmscf/d):		0.78	
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:	Unknown		
Utilization System Start Year:	2000		
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		24
Current Capacity:			
Planned Capacity:			
Utilities in County: Connecticut Light & Power Co; Fletcher Electric Light Co Inc			
D. ENVIROMENTAL BENEFITS OF UTILIZATION			
	<i>Potential</i>		<i>Current</i>
Methane Reduction (tons/yr):	4,493		0
CO2 Equivalent of CH4 Reduction (tons/yr):	94,351		0
Emissions Avoided by Fossil Fuel Displacement:	<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>
Coal:	18,943	120	13,530
Fuel Oil:	15,547	100	11,105
Natural Gas:	10,454	0	7,467
			123
			65
			0
E. CONTACT INFORMATION			
Landfill Owner		Landfill Operator	
Contact Name:	Tom Rasmussen, Superintendent	Tom Rasmussen	
Mailing Address:	500 Huckleberry Road	275 Broad Street	
Phone Number:	203-285-1833	203-285-1833	
Fax Number:			

* Italicized indicates values estimated by EPA.

December 5, 1998

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