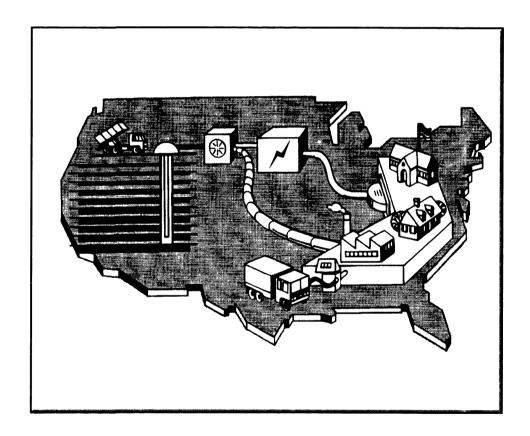


Landfill Gas-to-Energy Project Opportunities

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-toenergy 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, 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-inplace.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-inplace.

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.

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.



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

Exhibit 1: Connecticut MSW Landfill Summary

Category	No. of	Est. Capac	ity Potential	Est. CH4	Methane Ro		CO2 Equivalent of CH4		
	Landfills	Electricity (MW)	Gas Capacity (mmBtu/hr)	Generation (mmscf/d)	(tons	/yr)	Reduct (tons/		
				ļ	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		Elect	ricity Gen	eration P	roject				Direct Us	e Project		
	CC	D2 (tons/	yr)	so	2 (tons/	yr)	CC	2 (tons/	yr)	so	2 (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	o
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	LFG Collected	LFG	Status of LFGTE
		<2.5 million tons	2.5 to 4 million tons	>4 million tons	Operating in 1998		Utilization Project	Project
Current	Groton LF	<u> </u>	. []			<u> </u>	✓	Operational
Current	Hartford LF	V				V		Construction
Current	New Milford LF			V		V	~	Operational
Candidate	East Windsor LF	✓			~			Planned
Candidate	Manchester LF					V		Planned
Candidate	New Haven LF							Planned
Candidate	Shelton LF	~				~		Shutdown
Candidate	Windsor LF	V			✓			Planned
Other	Bristol LF	V						Unknown
Other	Canterbury LF	V				V		Unknown
Other	Danbury LF	V				Ш		Unknown
Other	Putnam LF	V						Unknown
Other	Waterbury-North End LF	~				V		Unknown
Unknown WIP	Bridgeport LF							Unknown
Unknown WIP	East Hartford LF	Ü		Ш		L		Unknown
Unknown WIP	Ellington LF					V		Unknown
Unknown WIP	Hampton LF				Ш			Unknown
Unknown WIP	Killingly LF					L		Unknown
Unknown WIP	Meriden LF							Unknown
Unknown WIP	Montville LF				•			Unknown
Unknown WIP	North Haven LF							Unknown
Unknown WIP	Torrington LF							Unknown
Unknown WIP	Wallingford LF							Unknown
Unknown WIP	Windham LF				✓			Unknown

			East Windsor			Landfill Category:	Candidate	
		A. G	ENERAL LANDFILL I	NFORMAT	ION			
Landfill Owner:	Boticel	lo, Inc.	Α	nnual Accep	tance Rate	(tons):	37,000	
Landfill Owner Type:	Private		Y	ear Annual A	Acceptance	Rate Reported:	1994	
Alternative Landfill Name	e: Norcap		D	Design Capacity (tons):				
City:	East W	indsor	Α	Acres Currently Landfilled (acres):				
County:	Hartfor	d	Α	verage Deptl	h (feet):			
State:	CT		1	995 Waste-in	n-Place (tor	ns):	837,000	
Year Open:	1976		1	998 Waste-in	-Place (ton	s):	948,000	
Year Closed:	1999						·····	
			B. LANDFILL GAS CO	LLECTION				
Estimated Methane Gener	ration (mmsc _j	f/d):		0.66				
LFG Collection System S	tatus:			Planned				
Current LFG Collected (n	nmscf/d):						•	
Collection and Treatment	System Requ	uired Under NSI	PS/EG:	No				
			C. LANDFILL GAS UT	ILIZATION	I			
Current Utilization:								
Utilization System S	tatus:	Planned						
Utilization System T	ype:	Unknown						
Utilization System St	tart Year:							
Electric Utility Provi	der(s):							
Natural Gas Provider	r(s):		•					
Energy Purchaser(s):								
Capacity:		Electrici	ty Generation Project (M'	W) (OR	Direct Use Project (mmBtu/h	r)	
Estimated Potential	Capacity:			2			21	
Current Capacity:								
Planned Capacity:								
Utilities in County:		Connecticut	Light & Power Co; Fletc	her Electric I	ight Co Inc	2		
		D. ENVII	OMENTAL BENEFIT	S OF UTILI	ZATION			
				ential		Current		
Methane Reduction (tons/	(vr)·		100	znnui	3,819	Current	0	
CO2 Equivalent of CH4 R	-	as/vr)·			80,189		0	
Emissions Avoided by Fos	ssil Fuel Disp	placement:	Electricity Gene	ration Projec	et	Direct Use Projec	rt	
			CO2 (tons/yr)	SO2 (to	ns/yr)	CO2 (tons/yr) SO	02 (tons/yr)	
		Coal:	16,575		105	11,499	105	
		Fuel Oil:	13,604		88	9,438	55	
	λ 7	atural Gas:	9,147		0	6,346	0	
		aiurai Gas.				0,340		
		Landfill	E. CONTACT INFOR	RMATION		Landfill Operator		
Contact Name: De	ennis Boticel	lo						
İ					Dlass			
Mailing Address: 32	21 Olcott Stre			Perre	Place			
Phone Number: 20	12 6/2 0E/F			202.6	12 0515			
20	03-643-8545			203-6	43-8545			
Fax Number:				•	•			
* Itallicized indicates valu	es estimated	by EPA.	Dec	ember 5, 199	18	State: CT Page	: 1	

Groton LF Landfill Category: Current A. GENERAL LANDFILL INFORMATION . 1990 (1997) 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): Groton City: Acres Currently Landfilled (acres): 44 County: New London Average Depth (feet): State: CT 1995 Waste-in-Place (tons): 2,000,000 Year Open: 2,000,000 1998 Waste-in-Place (tons): 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 Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Capacity: Estimated Potential Capacity: 6 Current Capacity: 0.2 Planned Capacity: Bozrah Light & Power Co; Connecticut Light & Power Co; Groton, City of, Dept of Utilities; Jewett C **Utilities in County:** D. ENVIROMENTAL BENEFITS OF UTILIZATION **Potential** Current 1.099 0 Methane Reduction (tons/yr): 0 CO2 Equivalent of CH4 Reduction (tons/yr): 23,069 Electricity Generation Project Emissions Avoided by Fossil Fuel Displacement: Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) 30 Coal: 4,736 30 3,308 Fuel Oil: 3,887 25 2,715 16 Natural Gas: 2,614 0 1,826 0 E. CONTACT INFORMATION Landfill Operator Landfill Owner Contact Name: Dawn Lemieux Dawn Lemieux Town Office PO Box Town Office PO Box Mailing Address: Phone Number: 603-744-8849 203-441-6740 Fax Number: * Itallicized indicates values estimated by EPA. December 5, 1998 State: CT Page: 2 STAR Version 1.0 / LMOP

		Hartford Lh		Landfill Category	: Current			
	A. G	ENERAL LANDFILL II	NFORMATION					
Landfill Owner:		A	nnual Acceptance Rate ((tons):	187,000			
Landfill Owner Type:	Public		ear Annual Acceptance		1994			
Alternative Landfill Name:		De	esign Capacity (tons):					
City:	Hartford	Acres Currently Landfilled (acres):						
County:	Hartford	Average Depth (feet):						
State:	CT	1995 Waste-in-Place (tons): 2,187						
Year Open:	1980	19	998 Waste-in-Place (tons	s):	2,187,000			
Year Closed:	1995							
]	B. LANDFILL GAS COI	LLECTION	,	-4			
Estimated Methane Generati	on (mmscf/d):		0.98					
LFG Collection System Statu	18:	Ope	rational					
Current LFG Collected (mms	scf/d):							
Collection and Treatment Sys	stem Required Under NSF	PS/EG:	No					
		C. LANDFILL GAS UT	ILIZATION	. 9				
Current Utilization:								
Utilization System Statu	is: Construction	1						
Utilization System Type								
Utilization System Start								
Electric Utility Provider								
Natural Gas Provider(s)								
Energy Purchaser(s):								
Capacity:	Electrici	ty Generation Project (MV	W) OR	Direct Use Project (mmBtu/h	ır)			
Estimated Potential Cap	pacity:		3		31			
Current Capacity:		•						
Planned Capacity:								
Hilitias in Country	Connections	Light & Power Co						
Utilities in County:								
	D. ENVII	ROMENTAL BENEFITS	S OF UTILIZATION	3 27 2				
,		Pote	ential	Current				
Methane Reduction (tons/yr).	:		5,651		0			
CO2 Equivalent of CH4 Redi	uction (tons/yr):		118,667		0			
= ****				_				
Emissions Avoided by Fossil	Fuel Displacement:	Electricity Gener	·	Direct Use Project				
		CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr) So	O2 (tons/yr)			
	Coal:	24,468	155	17,017	155			
	Fuel Oil:	20,082	129	13,966	81			
	Natural Gas:		0					
•	Naturat Gas:	13,503	0	9,391	0			
		E. CONTACT INFOR	MATION					
	Landfill	Owner		Landfill Operator				
Contact Name:			David Martin					
Mailing Address:			179 Allyn Street					
ividining Fladress.			1757 myn Street					
Phone Number:			000 510 175					
			203-549-1751					
Fax Number:								
w 1, 11 · 1 · 1 · 2 · 2	d . II En	<u> </u>		0				
* Itallicized indicates values of the state	esumaiea by EPA.	Dece	ember 5, 1998	State: CT Page	e: 3			

			Manchester LF			Landfill Category:	Candidate
		A. (GENERAL LANDFILL IN	FORMATION			a e ya
Landfill Owner:	City of	Manchester	Anı	nual Acceptance R	late (tons):		30,000
Landfill Owner Type:	Public		Yea	ır Annual Accepta	nce Rate Repo	rted:	1994
Alternative Landfill N				ign Capacity (ton			
City:	Manch			es Currently Land			62
County:	Hartfor	rd		erage Depth (feet)			
State:	CT			ste-in-Place (tons)			
Year Open:	•		199	8 Waste-in-Place	(tons):		
Year Closed:	2004						
			B. LANDFILL GAS COLI	LECTION .			Z 4
Estimated Methane G	eneration (mmsc	f/d):					
LFG Collection System			Opera	tional			
Current LFG Collecte							
Collection and Treatm	ent System Requ	uired Under NS		No			
			C. LANDFILL GAS UTIL	IZATION			2 2
Current Utilization:							
Utilization System	m Status:	Planned					
Utilization System		Reciprocat	ing Engine				
Utilization System		2000					
Electric Utility P							
Natural Gas Prov	ider(s):						
Energy Purchase	r(s):						
Capacity:		Electri	city Generation Project (MW)) OR	Direct U	se Project (mmBtu/hr)
Estimated Potent	ial Capacity:						
Current Capacity							
Planned Capacity							
Utilities in County:		Connecticu	ut Light & Power Co; Fletche	r Flactric Light C	o Inc		
Ouncies in County.	7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		IROMENTAL BENEFITS				(20°25) - 1765
		D. 131 ()	1		J.1	G	
Mad D. Laston (s			Poten	tial		. Current	
Methane Reduction (to	-).					
CO2 Equivalent of CH	14 Reauction (tol	ns/yr): 					
Emissions Avoided by	Fossil Fuel Disp	olacement:	Electricity Genera	tion Project		Direct Use Project	
·	•		CO2 (tons/yr)	SO2 (tons/yr)	CO		2 (tons/yr)
		Coal:		•			
		Fuel Oil:					ĺ
	N	atural Gas:					; ; !
			E. CONTACT INFORM	IATION			
		Landfil	l Owner	<u> </u>	Landfi	ll Operator	
Contact Name:	Louise Guarna	ccia Superinte	ndent				
		-	iidont	!			
Mailing Address:	41 Center Stree	et		!			,
Phone Number:	203-647-3248			203-647-324	8		:
	203 047-3240			203-047-324	·		;
Fax Number:							· · · · · · · · · · · · · · · · · · ·
* Itallicized indicates v	values estimated	by EPA.	Decen	nber 5, 1998	S	tate: CT Page:	4

		New Haven I		Landfill Category: Candid	date		
·	A. G	ENERAL LANDFILL I	NFORMATION				
Landfill Owner:	City of New Haven	Α	nnual Acceptance Rate ((tons): 72,8	800		
Landfill Owner Type:	Public	Y	Year Annual Acceptance Rate Reported:				
Alternative Landfill Name:		D	Design Capacity (tons):				
City:	New Haven	Α	cres Currently Landfille	d (acres):	24		
County:	New Haven	Α	verage Depth (feet):		:		
State:	СТ	W	Vaste-in-Place (tons):				
Year Open:		1:	998 Waste-in-Place (ton:	s):			
Year Closed:	1993			·			
]	B. LANDFILL GAS CO	LLECTION				
Estimated Methane Generation	on (mmscf/d):						
LFG Collection System Status	·				- 1		
Current LFG Collected (mms							
Collection and Treatment Sys		PS/EG·	No				
We will also		C. LANDFILL GAS UT					
<u> </u>							
Current Utilization:							
Utilization System Status							
Utilization System Type					1		
Utilization System Start							
Electric Utility Provider(
Natural Gas Provider(s):							
Energy Purchaser(s):	United Illun	ninating					
Capacity:	Electrici	ty Generation Project (M	W) OR	Direct Use Project (mmBtu/hr)			
Estimated Potential Cap	acity:						
Current Capacity:							
Planned Capacity:							
Utilities in County:	Connecticut	Light & Power Co: Unite	ed Illuminating Company	y; Wallingford Electric Div			
				,	38.4		
	D. ENVII	ROMENTAL BENEFIT	SOFULLIZATION	7			
		Pot	ential	Current			
Methane Reduction (tons/yr):					-		
CO2 Equivalent of CH4 Redu	ction (tons/yr):			1	:		
		71 11 0					
Emissions Avoided by Fossil	Fuel Displacement:	Electricity Gene	=	Direct Use Project	, ,		
		CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr) SO2 (tons/	yr)		
	Coal:				i		
	Fuel Oil:				į		
	Natural Gas:			· ·			
	4	E. CONTACT INFOR	RMATION				
	Landfill	Owner		Landfill Operator	t		
Contact Name: Brian	Funk, Acting Dir., Public	C Works	Brian Funk				
Mailing Address: 34 Mi	ddletown Avenue		34 Middletown A	avenue			
Phone Number: 203.7	07 6245		202.046.0101		•		
203-7	87-6345		203-946-8101				
Fax Number:							
* Itallicized indicates values e	stimated by EPA.	Dec	ember 5, 1998	State: CT Page:	5		

			New Milford			Landfill Cat	egory: Current	
		A. G	ENERAL LANDFILL	INFORMAT	TON			
Landfill Owner:			,	Annual Accep	tance Rate	(tons):	300,000	
Landfill Owner Type:	Public		•	Year Annual Acceptance Rate Reported:				
Alternative Landfill Name:	New Milfo	rd Gas Reco	very I	Design Capac	6,238,752			
City:	New Milfo	rd		Acres Current	-	d (acres):	75	
County:	Litchfield			Average Dept			90	
State:	CT	·		1995 Waste-i	n-Place (tor	s):	6,700,000	
Year Open:	1987		i	1998 Waste-ii	1-Place (ton	s):	7,300,000	
Year Closed:	1997							
		(%)	B. LANDFILL GAS CO	DLLECTION	1			
Estimated Methane General	•	<i>:</i>		2.29				
LFG Collection System Stat			Op	erational				
Current LFG Collected (mm				2.8				
Collection and Treatment Sy				No				
			C. LANDFILL GAS U	FILIZATIO	V		<u>: 70, </u>	
Current Utilization:								
Utilization System Stat		Operational						
Utilization System Typ		Gas Turbine						
Utilization System Star		1991						
Electric Utility Provide								
Natural Gas Provider(s								
Energy Purchaser(s):		Connecticut	Light & Power Co					
Capacity:		Electrici	ty Generation Project (M	IW)	OR	Direct Use Project (mm	nBtu/hr)	
Estimated Potential Ca	pacity:			7			71	
Current Capacity:	,			3.3			58	
Planned Capacity:								
Utilities in County:		Connecticut	Light & Power Co		[
2. Since the country.			ROMENTAL BENEFII	es of little	IZATION			
			_	Marian dia	22111011	Curre	ant	
Mathana Paduation (tonship	١.		PO	tential	13,212	Curre	10,792	
Methane Reduction (tons/yr CO2 Equivalent of CH4 Red).			277,448		226,638	
CO2 Equivalent of CH4 Kea		r): 			211,440			
Emissions Avoided by Fossi	l Fuel Displac	ement:	Electricity Gene	eration Proje	ct	Direct Use I	Project	
			CO2 (tons/yr)	SO2 (to	ns/yr)	CO2 (tons/yr)	SO2 (tons/yr)	
		Coal:	56,039		354	39,786	362	
		fuel Oil:	45,994		296	32,654	190	
	Natui	ral Gas:	30,927		0	21,957	0	
1			E. CONTACT INFO	RMATION			· · · · · · · · · · · · · · · · · · ·	
		Landfill	Owner			Landfill Operator		
Contact Name: Bill	Howard, Envi	ronmental E	ngineer					
Mailing Address: 182-	2 Danbury Ro	ad		!				
Phone Number: 203-	350-2222			203-3	350-2222			
·								
Fax Number:								
Fax Number: * Itallicized indicates values	antimated L	EDA	Ν-	cember 5, 199		State: CT	Page: 6	

			Shelton LF			Landfill Cat	egory:	Candidate
····		A. G1	ENERAL LANDFILL I	NFORMAT	ION	•		
Landfill Owner:			A	nnual Accep	tance Rate (tons):		
Landfill Owner Type:	Public		Y	ear Annual A	Acceptance	Rate Reported:		
Alternative Landfill Na	ıme:			esign Capaci	=	•		
City:	Shelton			cres Currentl	-	d (acres):		40
County:	Fairfield	d		verage Depth	•	,		174
State:	СТ	_		995 Waste-ir		s):		2,000,000
Year Open:	1990			998 Waste-in				2,000,000
Year Closed:	1994		12	oo wasie in	i iuce (ion.	·/·		2,000,000
1001 010300.	1//7		LANDFILL GAS CO	LLECTION				
								
Estimated Methane Ger	•	f/d):		0.93				
LFG Collection System			Ope	erational				
Current LFG Collected				1.2				
Collection and Treatme				No				
			LANDFILL GAS UT	ILIZATION	l (vi	4,344		- A (MIC) 13:
Current Utilization:								
Utilization System	Status:	Shutdown						
Utilization System	Type:	Reciprocatin	g Engine					
Utilization System		1995						
Electric Utility Pro								
Natural Gas Providence								
Energy Purchaser(United Illum	inating					
		4	8					
Capacity:		Electricit	y Generation Project (MY	W) ()R	Direct Use Project (mn	nBtu/hr)
Estimated Potentia	al Canacity:			3				29
Current Capacity:	ar capacing.			· ·				
Planned Capacity:	•			1.7				25
			7.00	1.7	<u> </u>			
Utilities in County:		Connecticut	Light & Power Co; Norw	alk Third Ta	xing Distric	t, Electric Dept; South N	orwalk	Elec W
		D. ENVIR	OMENTAL BENEFIT	S OF UTILI	ZATION.		# 19	
						6		
			Pote	ential		Curre	ent	
Methane Reduction (to					5,374			4,625
CO2 Equivalent of CH4	4 Reduction (tor	ıs/yr):			112,858	•		97,131
Emissions Avoided by I	Fossil Fuel Dist	lacement:	Electricity Gener	ration Projec		Direct Use	Project	•
Linustions Avoided by I	ossii ruei Disp	писетет.	CO2 (tons/yr)	SO2 (tor		CO2 (tons/yr)	-	2 (tons/yr)
			•	502 (10)			30	2 (tons/y/)
		Coal:	22,889		145	16,184		147
		Fuel Oil:	18,786		121	13,283		77
	27		12 622		0			0
	IV	atural Gas:	12,632		0	8,932		0
			E. CONTACT INFOR	MATION				
		Landfill (Owner			Landfill Operator		
Contact Name:	Carlo Berardin	elli						
Mailing Address:				170 4	Ilun Stract			
Mailing Address:	1410 Honeyspo	or Kuau		1/9 A	Allyn Street			
TO A STATE OF THE				I				
Phone Number:	203-386-9755			860-5	49-6390			
Fax Number:				!				
* Itallicized indicates vo	alues estimated	by EPA.	Dec	ember 5, 199	8	State: CT	Page:	7
STAR Versi	on 1.0 / LMOP							
T. L.C.11								

			Windsor LF		Landfill Cates	gory: Candidate
		A. GENERA	AL LANDFILL IN	FORMATION		3,4
Landfill Owner:	Town of Winds	or	An	nual Acceptance Rate ((tons):	34,000
Landfill Owner Type:	Public			ar Annual Acceptance	Rate Reported:	1994
Alternative Landfill Na		field LF		sign Capacity (tons):		
City:	Windsor			res Currently Landfille	d (acres):	69
County:	Hartford			erage Depth (feet):		
State:	CT			94 Waste-in-Place (ton	•	1,268,000
Year Open:	1973		199	98 Waste-in-Place (ton:	s):	1,404,000
Year Closed:	2004	B. LAN	DFILL GAS COL	LECTION		
Estimated Methane Ger	neration (mmscf/d):			0.78		
LFG Collection System			P	lanned		
Current LFG Collected						
Collection and Treatme	nt System Required Un	der NSPS/EG:		No		
		C. LAN	DFILL GAS UTI	LIZATION	76 3 B	
Current Utilization:						
Utilization System	Status: Plan	ned				
Utilization System	· -	nown				
Utilization System						
Electric Utility Pro						
Natural Gas Provid	, ,					
Energy Purchaser(s):					
Capacity:	I	Electricity Gene	ration Project (MW	OR	Direct Use Project (mmE	Stu/hr)
Estimated Potentia	al Capacity:			2		24
Current Capacity:						
Planned Capacity:						
Utilities in County:	Coni	necticut Light &	Power Co; Fletche	er Electric Light Co Inc	;	
	.	ENVIROME	NTAL BENEFITS	OF UTILIZATION		5.3
			Poter	ıtial	Curren	t
Methane Reduction (tor	ıs/yr):			4,493		0
CO2 Equivalent of CH4	Reduction (tons/yr):			94,351		0
Emissions Avoided by F	Cossil Fuel Displacemen		Electricity Genera	rtion Project	Direct Use Pi	roigat
Emissions Avoided by I	озы гиет Бізрійсетен	+	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
	C	al:	18,943	120	13,530	123
	Fuel (15,547	100	11,105	65
	Natural G	i			1	0
			10,454	- 0	7,467	
	L	andfill Owner	ONTACT INFORM	MATION	Landfill Operator	<u> </u>
Contact Name:	Tom Rasmussen, Super			Tom Rasmussen		
1	-					
Mailing Address:	500 Huckleberry Road			275 Broad Street		
Phone Number:	203-285-1833			203-285-1833		
t	_00 <u>_00</u> 1000			203-203-1033		
Fax Number:						
* Itallicized indicates va	lues estimated by EPA.		Decei	mber 5, 1998	State: CT	Page: 8
<i>k</i>	on 1.0 / LMOP					