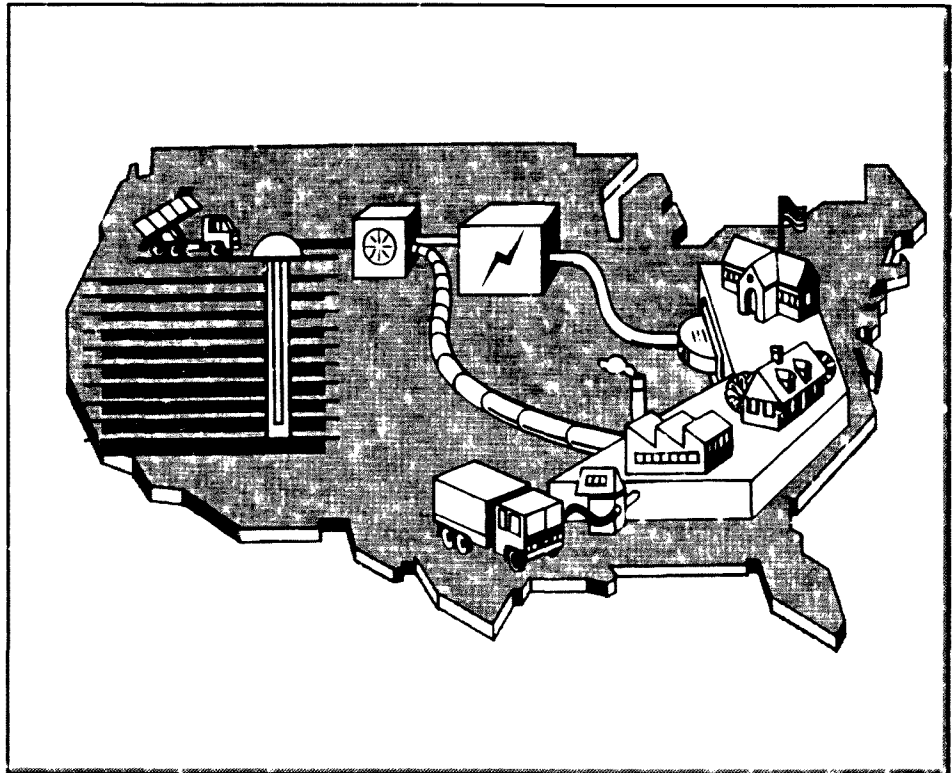




# Landfill Gas-to-Energy Project Opportunities

## Landfill Profiles for the State of Utah



## 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,<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: Utah 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	9	42	416	13	77,024	0	1,617,502	0
Other	35	9	90	3	16,716	0	351,026	0
Unknown WIP	5							
Total	49	50	506	16	93,739	0	1,968,527	0

### Exhibit 2: Potential Utah 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
Candidate	327,550	268,838	180,770	2,070	1,730	0	231,947	190,372	128,009	2,111	1,109	1
Other	69,457	57,007	38,332	439	367	0	50,336	41,314	27,780	458	241	0
Unknown WIP												
Total	397,006	325,844	219,103	2,509	2,097	0	282,283	231,685	155,789	2,569	1,350	2

### Exhibit 3: Index of Landfills in Utah

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				
Candidate	Bountiful City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Davis County Solid Waste Managemen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Duchesne County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Logan City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Salt Lake Valley LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Transjordan LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Uintah County/Vernal City LF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Washington County Solid Waste SSD #	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Weber County LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Beaver County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Blanding LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Brigham City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Carbon County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	City of Monticello LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Emery County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Garfield County/John's Valley LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Garfield County/Ticaboo LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Garrison LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Grand County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Green River LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Grouse Creek LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Iron County/ Armstrong Pit LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Kane County/Glendale LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Kane County/Kanab LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Manila City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Millard County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Nephi LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	North Utah County Special Service Dist	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Park Valley LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Payson City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Provo LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Rich County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	San Juan County/Bluff LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	San Juan County/Halls Crossing LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	San Juan County/Mexican Hat LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Sanpete SLF Coop	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Santaquin County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Sevier County/Sage Flat LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Snowville LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown

### Exhibit 3: Index of Landfills in Utah

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				
Other	South Utah County SSD/Bayview LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Summit County/Three Mile Canyon LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Tremonton LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Wendover City LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Yost LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Callao LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Eskdale LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Partoun LF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Tooele Army Depot LF #1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Unknown WIP	Tooele Army Depot LF #2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown

**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	City of Bountiful	Annual Acceptance Rate (tons):	36,438
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	2,000,000
City:	West Bountiful	Acres Currently Landfilled (acres):	100
County:	Davis	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	1,275,330
Year Open:	1962	1998 Waste-in-Place (tons):	1,348,206
Year Closed:	2046		

**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: 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:	2	22
Current Capacity:		
Planned Capacity:		

Utilities in County: Bountiful City Light & Power Dept; Farmington Electric Utility; Kaysville City Corp; Pacificorp; We

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	4,078		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	85,640		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	12,281	112
<i>Fuel Oil:</i>	14,252	92	10,079	59
<i>Natural Gas:</i>	9,583	0	6,778	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Mark Franc, Engineer	Mark W. Franc
Mailing Address:	1600 West 18th North PO Box 369	1600 West 18th North PO Box 369
Phone Number:	801-298-6125	801-298-6125
Fax Number:		



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Wasatch Energy Systems	Annual Acceptance Rate (tons):	48,425
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Davis County LF	Design Capacity (tons):	
City:	Layton	Acres Currently Landfilled (acres):	25
County:	Davis	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	1,840,150
Year Open:	1959	1998 Waste-in-Place (tons):	1,937,000
Year Closed:	2022		

**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: Bountiful City Light &amp; Power Dept; Farmington Electric Utility; Kaysville City Corp; Pacificorp; We

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
Methane Reduction (tons/yr):	4,620		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	97,020		0	
Emissions Avoided by Fossil Fuel Displacement:	Electricity Generation Project		Direct Use Project	
	Coal:	19,732      125	13,913      127	
	Fuel Oil:	16,195      104	11,419      67	
Natural Gas:	10,890      0	7,678      0		

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	LeGrand Bitter, Director	LeGrand W. Bitter
Mailing Address:	650 East Highway 193	650 East Highway 193
Phone Number:	801-771-3032	801-771-3032
Fax Number:		





**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Duchesne & Wasatch Counties	Annual Acceptance Rate (tons):	18,948
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Blue Bench Landfill	Design Capacity (tons):	4,300,000
City:	Duchesne	Acres Currently Landfilled (acres):	
County:	Duchesne	Average Depth (feet):	
State:	UT	1994 Waste-in-Place (tons):	2,337,896
Year Open:	1984	1998 Waste-in-Place (tons):	2,413,688
Year Closed:	2044		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	1.04
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		32
Current Capacity:			
Planned Capacity:			

Utilities in County: Moon Lake Electric Assn Inc; Pacificorp; Western Area Power Admin

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current		
Methane Reduction (tons/yr):	5,986		0		
CO2 Equivalent of CH4 Reduction (tons/yr):	125,706		0		
Emissions Avoided by Fossil Fuel Displacement:	<i>Electricity Generation Project</i>		<i>Direct Use Project</i>		
		CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
	Coal:	25,257	160	18,026	164
	Fuel Oil:	20,730	133	14,795	86
Natural Gas:	13,939	0	9,948	0	

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	George Adams, Solid Waste Manager	George Adams
Mailing Address:	P.O. Box 228 Courthouse	P.O. Box 228 Courthouse
Phone Number:	435-738-2417	435-738-2417
Fax Number:		

\* Italicized indicates values estimated by EPA.



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	City of Logan	Annual Acceptance Rate (tons):	68,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1995
Alternative Landfill Name:		Design Capacity (tons):	2,893,588
City:	Logan	Acres Currently Landfilled (acres):	85
County:	Cache	Average Depth (feet):	18
State:	UT	1996 Waste-in-Place (tons):	1,510,203
Year Open:	1964	1998 Waste-in-Place (tons):	1,646,203
Year Closed:	2015		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	0.79
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: Bonneville Power Admin; Logan City Munic Light & Power; Pacificorp

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
<i>Methane Reduction (tons/yr):</i>	4,565		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	95,857		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>
Coal:	19,732	125	13,746	125
Fuel Oil:	16,195	104	11,282	66
Natural Gas:	10,890	0	7,586	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Roger Sunada, S.W. & Environmental Dir	Roger Sunada
Mailing Address:	1800 West 200 North	1800 West 200 North
Phone Number:	801-750-9953	801-750-9953
Fax Number:		

\* *Italicized indicates values estimated by EPA.*

December 5, 1998

State: UT

Page:

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**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Salt Lake County	Annual Acceptance Rate (tons):	915,428
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Salt Lake County SWM Facility	Design Capacity (tons):	25,807,106
City:	Midvale	Acres Currently Landfilled (acres):	
County:	Salt Lake	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	13,731,420
Year Open:	1982	1998 Waste-in-Place (tons):	15,562,276
Year Closed:	2020		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	4.40
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)
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Estimated Potential Capacity:	14		138
Current Capacity:			
Planned Capacity:			

Utilities in County:	Murray City Power Dept; Pacificorp; Western Area Power Admin
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**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>		25,430		0
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>		534,030		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>	108,131	684	76,579	697
<i>Fuel Oil:</i>	88,749	571	62,853	366
<i>Natural Gas:</i>	59,676	0	42,263	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Stephen Cooper	Dan Bauer
Mailing Address:	2250 South Redwood, Suite 7	P.O. Box 308
Phone Number:	801-974-6904	801-974-6920
Fax Number:		



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Salt Lake County	Annual Acceptance Rate (tons):	205,308
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	
City:	West Jordan	Acres Currently Landfilled (acres):	
County:	Salt Lake	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	8,622,936
Year Open:	1955	1998 Waste-in-Place (tons):	9,033,552
Year Closed:	2021		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	2.03
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)
<i>Estimated Potential Capacity:</i>	6		63
Current Capacity:			
Planned Capacity:			

Utilities in County: Murray City Power Dept; Pacificorp; Western Area Power Admin

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	11,737		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	246,471		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>	49,724	314	35,343	322
<i>Fuel Oil:</i>	40,812	263	29,008	169
<i>Natural Gas:</i>	27,442	0	19,506	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Romney Stewart	Romney Stewart
Mailing Address:	10640 S. 7250 W	10640 S. 7250 W.
Phone Number:	801-569-8994	801-569-8994
Fax Number:		

\* *Italicized indicates values estimated by EPA.*



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Uintah County and Vernal City	Annual Acceptance Rate (tons):	59,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	
City:	Vernal	Acres Currently Landfilled (acres):	
County:	Uintah	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	2,773,000
Year Open:	1950	1998 Waste-in-Place (tons):	2,891,000
Year Closed:	2008		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	0.88
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	28
Current Capacity:		
Planned Capacity:		

Utilities in County: Moon Lake Electric Assn Inc; PacifiCorp; Western Area Power Admin

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	5,089		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	106,861		0	
<b>Emissions Avoided by Fossil Fuel Displacement:</b>	<b>Electricity Generation Project</b>		<b>Direct Use Project</b>	
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
Coal:	22,100	140	15,324	139
Fuel Oil:	18,139	117	12,577	73
Natural Gas:	12,197	0	8,457	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Douglas Slaugh, Commissioner	Douglas Slaugh
Mailing Address:	152 East 100 North	152 East 100 North
Phone Number:	435-781-0770	435-781-0770
Fax Number:		

\* Italicized indicates values estimated by EPA.



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Washington County	Annual Acceptance Rate (tons):	68,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:	Washington County LF	Design Capacity (tons):	
City:	Washington	Acres Currently Landfilled (acres):	
County:	Washington	Average Depth (feet):	
State:	UT	Waste-in-Place (tons):	1,292,000
Year Open:	1978	1998 Waste-in-Place (tons):	1,428,000
Year Closed:	2067		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d): 0.78

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:	2	25
Current Capacity:		
Planned Capacity:		

Utilities in County: Dixie Escalante R E A Inc; Enterprise Electric Dept; Garkane Power Association Inc; Hurricane City

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	4,528		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	95,094		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>	18,943	120	13,637	124
<i>Fuel Oil:</i>	15,547	100	11,192	65
<i>Natural Gas:</i>	10,454	0	7,526	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Shirley Kelley, Manager	Kory Coleman
Mailing Address:	260 West St. George Blvd #205	557 N Industrial Road
Phone Number:	435-673-2813	435-628-2821
Fax Number:		

\* *Italicized indicates values estimated by EPA.*

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**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Weber County	Annual Acceptance Rate (tons):	177,727
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1994
Alternative Landfill Name:		Design Capacity (tons):	5,808,000
City:	Ogden	Acres Currently Landfilled (acres):	
County:	Weber	Average Depth (feet):	
State:	UT	1994 Waste-in-Place (tons):	5,474,324
Year Open:	1966	1998 Waste-in-Place (tons):	6,185,232
Year Closed:	2007		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	1.90
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)
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Estimated Potential Capacity:	6		59
Current Capacity:			
Planned Capacity:			

Utilities in County:	Pacificorp; Western Area Power Admin
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**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>		10,992		0
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>		230,824		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>	46,567	294	33,100	301
<i>Fuel Oil:</i>	38,220	246	27,167	158
<i>Natural Gas:</i>	25,700	0	18,267	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Karlene Linford, Dir. of Waste Disposal	Karlene Linford
Mailing Address:	2510 Washington Boulevard	2599 A Avenue
Phone Number:	801-399-8401	801-399-8806
Fax Number:		

