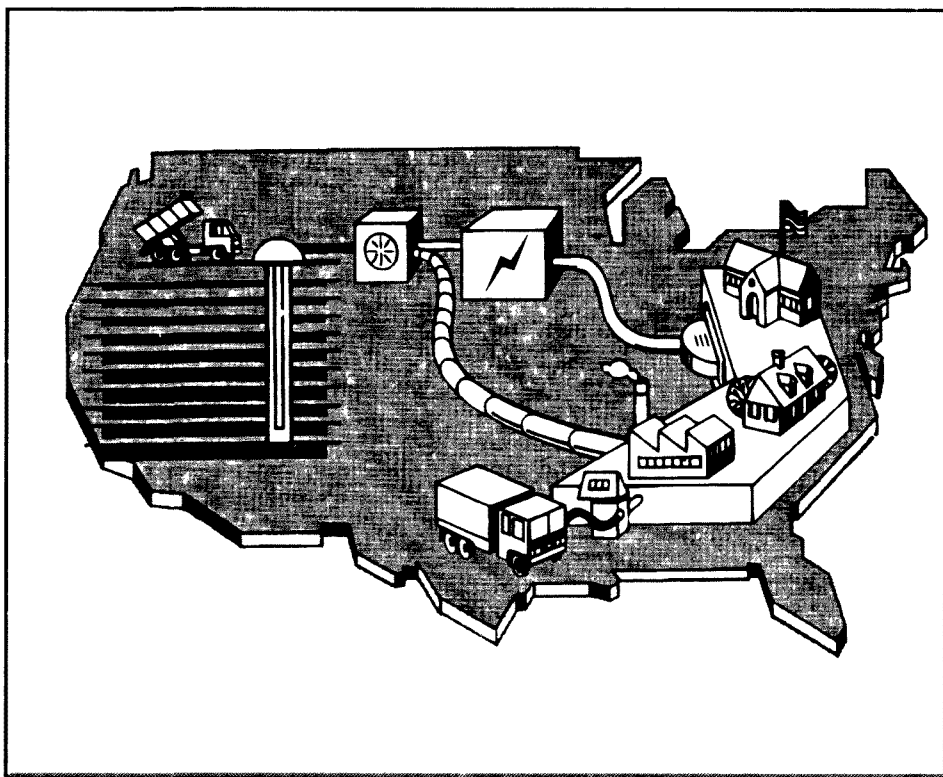




# Landfill Gas-to-Energy Project Opportunities

## Landfill Profiles for the State of Oregon



## 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: Oregon 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	4	16	164	5	30,307	6,167	636,453	129,507
Candidate	5	20	197	6	36,480	0	766,086	0
Other	3	3	35	1	6,458	0	135,612	0
Total	12	40	396	13	73,245	6,167	1,538,151	129,507

## Exhibit 2: Potential Oregon 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	128,652	105,592	71,001	813	680	0	91,267	74,907	50,369	831	437	0
Candidate	156,277	128,265	86,247	988	826	0	109,855	90,164	60,628	1,000	526	1
Other	26,836	22,025	14,810	170	142	0	19,446	15,961	10,732	177	93	0
Total	311,764	255,882	172,058	1,971	1,647	0	220,568	181,033	121,729	2,007	1,055	1

### Exhibit 3: Index of Landfills in Oregon

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	Coffin Butte LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Current	River Bend Sanitary LF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Current	Short Mountain LF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Current	St. Johns LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operational
Candidate	Columbia Ridge LF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Klamath Falls LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Knott Pit LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Potential
Candidate	Northern Wasco County LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Candidate	Roseburg LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Finley Buttes LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Milton-Freewater LF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unknown
Other	Pendleton LF	<input checked="" 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:	Valley Landfills, Incorporated	Annual Acceptance Rate (tons):	250,000
Landfill Owner Type:	Private	Year Annual Acceptance Rate Reported:	1995
Alternative Landfill Name:		Design Capacity (tons):	1,000,000
City:	Corvallis	Acres Currently Landfilled (acres):	61
County:	Benton	Average Depth (feet):	
State:	OR	1995 Waste-in-Place (tons):	3,400,000
Year Open:	1978	1998 Waste-in-Place (tons):	4,150,000
Year Closed:	2002		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	1.48
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:	Reciprocating Engine
Utilization System Start Year:	1996
Electric Utility Provider(s):	
Natural Gas Provider(s):	
Energy Purchaser(s):	Pacific Northwest Generating Cooperative

Capacity:	Electricity Generation Project (MW)	OR	Direct Use Project (mmBtu/hr)
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Estimated Potential Capacity:	5	46
Current Capacity:	2.4	
Planned Capacity:		

Utilities in County:	Bonneville Power Admin; Consumers Power Inc; PacifiCorp
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**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	8,554		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	179,626		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:	36,307	230	25,758	234
Fuel Oil:	29,799	192	21,141	123
Natural Gas:	20,037	0	14,216	0

**E. CONTACT INFORMATION**

	Landfill Owner	Landfill Operator
Contact Name:	Brian Stone, Operations Manager	Brian Stone, Operations Manager
Mailing Address:	P.O. Box 807	P.O. Box 807
Phone Number:	541-745-2018	541-745-2018
Fax Number:		541-745-3826



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	WM Disp. Services of OR	Annual Acceptance Rate (tons):	1,670,000
Landfill Owner Type:	Private	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:		Design Capacity (tons):	10,300,000
City:	Arlington	Acres Currently Landfilled (acres):	650
County:	Gilliam	Average Depth (feet):	
State:	OR	Waste-in-Place (tons):	8,120,000
Year Open:	1990	1998 Waste-in-Place (tons):	10,440,000
Year Closed:	2002		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	3.09
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:	10	97
Current Capacity:		
Planned Capacity:		

Utilities in County: Bonneville Power Admin; Columbia Basin Elec Coop Inc; PacifiCorp; Wasco Electric Coop Inc

**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	17,855		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	374,959		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:	76,560	484	53,769	489
Fuel Oil:	62,837	405	44,131	257
Natural Gas:	42,252	0	29,674	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator
Contact Name:	Doris Bjorn	Doris Bjorn
Mailing Address:	18177 Cedar Springs Lane	18177 Cedar Springs Lane
Phone Number:	541-454-2030	541-454-2030
Fax Number:		541-454-3312

\* Italicized indicates values estimated by EPA.

December 5, 1998

State: OR

Page:

2



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Klamath County	Annual Acceptance Rate (tons):	75,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:		Design Capacity (tons):	1,540,000
City:	Bonanza	Acres Currently Landfilled (acres):	60
County:	Klamath	Average Depth (feet):	
State:	OR	Waste-in-Place (tons):	1,100,000
Year Open:	1977	1998 Waste-in-Place (tons):	1,210,000
Year Closed:	2007		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d): 0.73

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	23
Current Capacity:		
Planned Capacity:		

Utilities in County: Bonneville Power Admin; Midstate Electric Coop Inc; Pacificorp

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	4,206		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	88,326		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>	18,153	115	12,666	115
<i>Fuel Oil:</i>	14,899	96	10,395	61
<i>Natural Gas:</i>	10,019	0	6,990	0

**E. CONTACT INFORMATION**

## Landfill Owner

## Landfill Operator

Contact Name:	Keith Read, Director	Keith Read, Director
Mailing Address:	3735 Shasta Way	3735 Shasta Way
Phone Number:	541-883-4696	541-883-4696
Fax Number:		541-882-3046





**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Deschutes County	Annual Acceptance Rate (tons):	80,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:		Design Capacity (tons):	1,500,000
City:	Bend	Acres Currently Landfilled (acres):	130
County:	Deschutes	Average Depth (feet):	
State:	OR	Waste-in-Place (tons):	1,690,000
Year Open:	1971	1998 Waste-in-Place (tons):	1,820,000
Year Closed:	2007		

**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:	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:	3		28
Current Capacity:			
Planned Capacity:			

Utilities in County: Bonneville Power Admin; Central Electric Coop Inc; Harney Electric Coop Inc; Midstate Electric Co

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
Methane Reduction (tons/yr):	5,108		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	107,268		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:	22,100	140	15,382	140
Fuel Oil:	18,139	117	12,625	74
Natural Gas:	12,197	0	8,489	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator
Contact Name:	Tim Schimke, Director	Tim Schimke, Director
Mailing Address:	61000 SE 27th St.	61000 SE 27th St.
Phone Number:	541-317-3163	541-317-3163
Fax Number:	541-317-3959	541-317-3959

\* Italicized indicates values estimated by EPA.

December 5, 1998

State: OR

Page:

4



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	USA Waste Cascade District	Annual Acceptance Rate (tons):	95,000
Landfill Owner Type:	Private	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:	The Dalles Landfill	Design Capacity (tons):	366,286
City:	The Dalles	Acres Currently Landfilled (acres):	170
County:	Wasco	Average Depth (feet):	
State:	OR	Waste-in-Place (tons):	1,600,000
Year Open:	1972	1998 Waste-in-Place (tons):	1,728,000
Year Closed:	2001		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	0.86
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	27
Current Capacity:		
Planned Capacity:		

Utilities in County: Bonneville Power Admin; Central Electric Coop Inc; Northern Wasco County P U D; Wasco Electric

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	4,972		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	104,412		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:	21,311	135	14,973	136
Fuel Oil:	17,491	113	12,289	72
Natural Gas:	11,761	0	8,263	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator	
Contact Name:	Jim Tarr, Site Manager	Jim Tarr, Site Manager	
Mailing Address:	2550 Steele Rd.	2550 Steele Rd.	
Phone Number:	541-296-4082	541-296-4082	
Fax Number:			

\* Itallicized indicates values estimated by EPA.

December 5, 1998

State: OR

Page:

5



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Riverbend Landfill Company Incorporated	Annual Acceptance Rate (tons):	330,000
Landfill Owner Type:	Private	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:		Design Capacity (tons):	4,200,000
City:	McMinnville	Acres Currently Landfilled (acres):	450
County:	Yamhill	Average Depth (feet):	
State:	OR	1995 Waste-in-Place (tons):	2,300,000
Year Open:	1982	1998 Waste-in-Place (tons):	2,900,000
Year Closed:	2020		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	1.16
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:	Leachate Evaporation
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)
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Estimated Potential Capacity:	4	36
Current Capacity:		
Planned Capacity:		

Utilities in County:	Bonneville Power Admin; McMinnville Water & Light; Portland General Electric Co; Tillamook Peo
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**D. ENVIRONMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	6,705		0	
CO2 Equivalent of CH4 Reduction (tons/yr):	140,807		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:	28,414	180	20,192	184
Fuel Oil:	23,321	150	16,572	97
Natural Gas:	15,681	0	11,144	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator
Contact Name:	Dan Wilson, Site Manager	Dan Wilson, Site Manager
Mailing Address:	13469 Southwest Highway 18	13469 Southwest Highway 18
Phone Number:	503-472-3176	503-472-3176
Fax Number:		

\* Italicized indicates values estimated by EPA.

December 5, 1998

State: OR

Page:

6



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Douglas County Southwest Administration	Annual Acceptance Rate (tons):	97,700
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	1998
Alternative Landfill Name:		Design Capacity (tons):	480,000
City:	Roseburg	Acres Currently Landfilled (acres):	35
County:	Douglas	Average Depth (feet):	
State:	OR	1995 Waste-in-Place (tons):	1,075,000
Year Open:	1975	1998 Waste-in-Place (tons):	1,300,000
Year Closed:	2007		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d): 0.75

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	24
Current Capacity:		
Planned Capacity:		

Utilities in County: Bonneville Power Admin; Central Lincoln People's Ut Dt; Coos-Curry Electric Coop Inc; Douglas Ele

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	4,339		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	91,121		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>	18,153	115	13,067	119
<i>Fuel Oil:</i>	14,899	96	10,724	63
<i>Natural Gas:</i>	10,019	0	7,211	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator
Contact Name:	Terri Peterson	Chuck Cates, Environmental Coordinator
Mailing Address:	1036 SE Douglas Ave. #219	1036 SE Douglas Ave. #219
Phone Number:	541-440-4350	541-440-4526
Fax Number:		



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Lane County	Annual Acceptance Rate (tons):	240,000
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	
Alternative Landfill Name:		Design Capacity (tons):	
City:	Eugene	Acres Currently Landfilled (acres):	64
County:	Lane	Average Depth (feet):	160
State:	OR	1994 Waste-in-Place (tons):	3,410,000
Year Open:	1976	1998 Waste-in-Place (tons):	3,410,000
Year Closed:	2014		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d):	1.29
LFG Collection System Status:	Operational
Current LFG Collected (mmscf/d):	1.6
Collection and Treatment System Required Under NSPS/EG:	Yes

**C. LANDFILL GAS UTILIZATION**

## Current Utilization:

Utilization System Status:	Operational
Utilization System Type:	Reciprocating Engine
Utilization System Start Year:	1992
Electric Utility Provider(s):	Emerald Peoples Utility District
Natural Gas Provider(s):	
Energy Purchaser(s):	Emerald Peoples Utility District

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

Estimated Potential Capacity:	4	40
Current Capacity:	3.2	33
Planned Capacity:		

Utilities in County:

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	Potential		Current	
Methane Reduction (tons/yr):	7,459		6,167	
CO2 Equivalent of CH4 Reduction (tons/yr):	156,645		129,507	
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:	31,571	200	22,463	204
Fuel Oil:	25,912	167	18,436	107
Natural Gas:	17,424	0	12,397	0

**E. CONTACT INFORMATION**

Landfill Owner

Landfill Operator

Contact Name:	Ken Kohl	
Mailing Address:	3100 E. 17th Ave	
Phone Number:	541-682-4120	503-687-4120
Fax Number:		

\* Italicized indicates values estimated by EPA.

December 5, 1998

State: OR

Page:

8



**A. GENERAL LANDFILL INFORMATION**

Landfill Owner:	Portland Metro	Annual Acceptance Rate (tons):	
Landfill Owner Type:	Public	Year Annual Acceptance Rate Reported:	
Alternative Landfill Name:		Design Capacity (tons):	
City:	Portland	Acres Currently Landfilled (acres):	220
County:	Multnomah	Average Depth (feet):	65
State:	OR	Waste-in-Place (tons):	
Year Open:		1998 Waste-in-Place (tons):	13,839,604
Year Closed:	1991		

**B. LANDFILL GAS COLLECTION**

Estimated Methane Generation (mmscf/d): 1.31

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: Direct Thermal

Utilization System Start Year: 1998

Electric Utility Provider(s):

Natural Gas Provider(s):

Energy Purchaser(s): Ash Grove Cement Company

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

Estimated Potential Capacity:	4	41
Current Capacity:		100
Planned Capacity:		

Utilities in County:

**D. ENVIROMENTAL BENEFITS OF UTILIZATION**

	<i>Potential</i>		<i>Current</i>	
<i>Methane Reduction (tons/yr):</i>	7,589		0	
<i>CO2 Equivalent of CH4 Reduction (tons/yr):</i>	159,375		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>	32,360	205	22,854	208
<i>Fuel Oil:</i>	26,560	171	18,758	109
<i>Natural Gas:</i>	17,859	0	12,613	0

**E. CONTACT INFORMATION**

Landfill Owner		Landfill Operator
Contact Name:	Paul Ehringer, Landfill Manager	
Mailing Address:	600 NE Grand Ave	
Phone Number:	503-797-1795	503-797-1795
Fax Number:	503-797-1789	

\* *Italicized indicates values estimated by EPA.*

December 5, 1998

State: OR

Page:

9

