



SW237  
**ECDC**  
ENVIRONMENTAL L.C.  
AN ALLIED WASTE COMPANY



February 28, 2012

2013-002151  
Division of  
Solid and Hazardous Waste

**MAR - 1 2013**

Scott Anderson, Director  
Department of Environmental Quality  
Division of Solid and Hazardous  
195 North 1950 West, 2<sup>nd</sup> Floor  
Salt Lake City, UT 84114

Subject: Wasatch Regional Landfill 2012 Solid Waste Report

Dear Mr. Anderson,

Please find enclosed the Wasatch Regional Landfill 2012 Solid Waste Report. The report includes the following attachments: Quarterly gas monitoring summary, Safety and Training Schedule, Closure and Post Closure, CPC, cost estimates.

The Closure and Post Closure estimates have been updated by the DEQ recommended CPI of 1.01767 and certified by Geo-Logic Associates. Wasatch is in the process of updated the financial assurance bond to reflect the currents CPC estimates and will provide the bond as soon as it becomes available.

The 2012 semi-annual ground water monitoring reports were previously submitted.

If you have any questions, please contact me at 435-888-4418 (22).

Sincerely,

Darin Olson

Attachments:

cc: Tooele County Health Department  
Tooele County Engineering Department

SW237

# SOLID WASTE LANDFILL ANNUAL REPORT

For Calendar year 2012

MAR - 1 2013

2013-002151

### Administrative Information (Please enter all the information requested below - type or print legibly)

Facility Name: Wasatch Regional Landfill  
 Facility Mailing Address: 8833 North Rowley Road  
(Number & Street, Box and/or Route)  
 City: North Skull Valley Zip Code: 84029  
 County: Tooele Permit No.: 0501M2

#### Owner

Name Wasatch Regional Landfill Phone No.: (801) 924-8540  
 Mailing Address: 8833 North Rowley Road  
(Number & Street, Box and/or Route)  
 City: North Skull Valley State: Utah Zip Code: 84029  
 Contact's Name: Lester Lemmon Title: Site Manager  
 Contact's Mailing Address: 8833 North Rowley Road  
 Phone No.: (801) 924-8540 Contact's Email Address:  
l100035@republicservices.com

#### Operator (Complete this section only if the operator is not an employee of the Owner shown above)

Name: Same as Above Phone No.: ( )  
 Mailing Address: \_\_\_\_\_  
(Number & Street, Box and/or Route)  
 City: East Carbon State: Utah Zip Code: \_\_\_\_\_  
 Contact's Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Contact's Mailing Address: \_\_\_\_\_  
 Phone No.: ( ) Contact's Email Address: \_\_\_\_\_

### Facility Type and Status

- Class I                       Class IIIb                       Class V  
 Class II                       Class IVa                       Class VI  
 Class IIIa                       Class IVb

Facility operates separate cells for C/D and municipal waste. Yes  No   
 If facility was permanently closed during the year enter date closed: N/A

### Annual Disposal

Total tons received at facility for disposal:

Waste Type	Waste Origin		Total	Measurement	
	In-State	Out-of-State		Tons	Cubic Yards
Municipal	<u>497,357</u>	<u>0</u>	<u>497,357</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Industrial	<u>52,005</u>	<u>3,788</u>	<u>55,793</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C/D <sup>1</sup>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup>C/D waste, includes all waste going to a Class IV or VI landfill cell

### Conversion Factor Used

X None Used  From rules  List Site Specific Conversion: \_\_\_\_\_

**Recycling**

Material Recycled: 0 Tons  Cubic Yds.   
(Material recycled should not be included in disposed tons reported Report compost on separate form Circle tons or yards)

**Utah Disposal Fee**

Disposal Fee Required to be Paid to State Yes X No

Fee Paid	Municipal	<u>\$ 64,656</u>	C/D	\$ _____
	Industrial	<u>\$ 139,483</u>	Annual	\$ _____

(Municipal, Industrial and C/D are fees paid by Commercial Facilities. Annual fee is paid by facilities operated by a municipality)

**Landfill Capacity**

Current Landfill Remaining Capacity

Tons: 161,127,037 @ 1,479 lbs/cy Cubic Yards: 217,876,656  
Years: 135 Acres: 733

Acres Currently Open: 71 Acres Currently Closed: 0

**Financial Assurance**

Current Closure Cost Estimate: \$2,122,750

Current Post-Closure Cost Estimate: \$1,143,071

Current Amount or Balance in Mechanism: \$3,265,821

(If facility permit has been renewed if balance does not equal or exceed total for closure and post-closure care please contact the Division)

Current Financial Assurance Mechanism: Bond

(ie Bond, Trust Fund, Corporate or government Test etc.)

Mechanism Holder and Account Number: Travelers: 104569268

(ie Name of Bond Company, Bank etc Account number)

**Financial Assurance:** Each facility must recalculate the cost of closure and post-closure care to account for inflation and design changes each year. The inflation factor can be found on the Division web page. Facilities that are using a trust account should include a copy of the most recent account statement.

**Note** Facilities using "Local Government Financial Test" or the "Corporate Financial Test" must provide the information required in R315-309-8(4) or R315-309-9(3) each year.

**Other Required Reports**

Ground Water Monitoring: Class I and V landfills only. Check if exempt

Explosive Gas Monitoring: Class I, II and V landfills only. Check if exempt

Training Report: A report of all training programs or procedures completed by facility personnel during the year.

Signature:  Date: 2/15/13

Signature should be by an executive officer, general partner, proprietor, elected official, or a duly authorized representative. A duly authorized representative must meet the requirements of the solid waste rules (UAC R315-310-2(4)(d)).

Print name: Tim Powell Title: Area President

# Geo-Logic ASSOCIATES

February 6, 2013  
Project No. 2013.A005

Mr. Darin Olson  
Republic Services  
1111 West Hwy 123  
East Carbon, UT 84520

**Re: 2013 Closure Post-Closure Estimate for the Wasatch Regional Landfill**

Dear Darin,

Per your request, Geo-Logic Associates (GLA) has revised the Closure and Post-Closure Cost Estimate for the Wasatch Regional Landfill operated by Republic Services, Inc. (Republic). This letter is provided to certify that the attached estimates (Tables 1 through 3) were prepared in accordance with generally accepted civil engineering and waste management practices and in accordance with the requirements of 40 CFR 258.60, Subpart F. It should be noted that no corrective action is anticipated for the site and therefore, no costs for corrective action are provided in the estimates.

The 2013 Closure and Post-Closure Costs were derived after reviewing the previous cost estimates and adjusting the cost spreadsheets, where applicable, by the Utah Department of Environmental Quality (UDEQ) Inflation Adjustment of 1.01767. Please note that there were no changes from the 2012 to 2013 Closure Cost due to an increase in the landfill area from expansion construction or new closure activities.

We hope this provides you with the information you requested. If you have any question regarding the cost estimate, please contact me at your earliest convenience at (530) 272-2448.

Yours sincerely,



Todd Ramey, P.E.  
Senior Project Manager

Enclosure - Tables 1 through 3



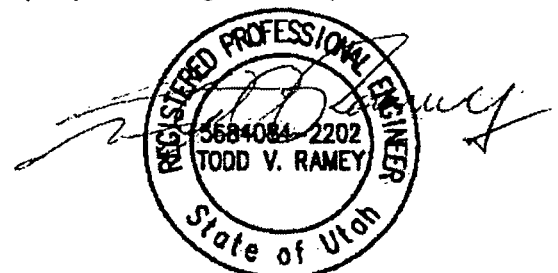
Exp. 3/31/13

**TABLE 1  
WASATCH REGIONAL LANDFILL  
CLOSURE COST ESTIMATES SUMMARY**

CLOSURE COSTS		MEASURE	UNIT COST	QUANTITY	TOTAL
<b>Supply &amp; Placement of Closure Cap</b>					
General Contractor Mobilization/Demobilization	Lump Sum	\$	36,712.95	1	\$ 36,712.95
Soil Cover (30")	Cubic Yard	\$	3.37	297340	\$ 1,003,299.26
Grading of Waste/Surface Preparation	Lump Sum	\$	21,048.87	1	\$ 21,048.87
Surveying	Acre	\$	1,676.59	74	\$ 123,599.17
Grass Erosion Control on Slopes <sup>(2)</sup>	Acre	\$	786.71	59	\$ 46,391.41
<b>Subtotal - Supply and Placement of Closure Cap</b>					<b>\$ 1,231,051.66</b>
<b>Stormwater/Groundwater Controls</b>					
Channel Excavations	Linear Feet	\$	6.96	3870	\$ 26,945.77
Riprap Channel Granular Filter (run-on control)	Cubic Yard	\$	49.25	1690	\$ 83,238.07
Riprap Channel Riprap (run-on control)	Cubic Yard	\$	47.98	2530	\$ 121,385.81
Downdrain Pipe	Linear Feet	\$	91.05	805	\$ 73,296.15
Install Remaining Groundwater Drain (open channel)	Cubic Yard	\$	3.40	63355	\$ 215,407.00
Install Remaining Groundwater Drain (pipe)	Linear Feet	\$	66.42	3525	\$ 234,146.24
Install Drain Pipe Under Railroad <sup>(1)</sup>	Lump Sum	\$	109,328.50	1	\$ 109,328.50
<b>Subtotal - Stormwater/Groundwater Controls</b>					<b>\$ 648,340.53</b>
<b>Leachate Evaporation Pond (assume approximately 100' x 100' x 10' deep)</b>					
Pond Excavation/Earthwork	Cubic Yard	\$	2.20	1850	\$ 4,063.46
GCL	Square Feet	\$	0.47	13100	\$ 6,170.65
60 Mil HDPE Textured, 3-layers	Square Feet	\$	1.09	39300	\$ 42,957.97
Geonet, 2-Layers	Square Feet	\$	0.46	26200	\$ 11,946.62
Leak Detection Pipes and Sumps	Each	\$	10,489.42	2	\$ 20,978.83
<b>Subtotal - Leachate Evaporation Pond</b>					<b>\$ 86,117.53</b>
<b>Other: (List)</b>					
Engineering Site Evaluation	Lump Sum	\$	9,827.55	1	\$ 9,827.55
Design, Specification & CQA/CQC Manual	Lump Sum	\$	49,137.74	1	\$ 49,137.74
Project Mgmt & QA/QC, Oversight	Lump Sum	\$	98,275.49	1	\$ 98,275.49
<b>Subtotal - Other</b>					<b>\$ 157,240.78</b>
<b>TOTAL</b>					<b>\$ 2,122,750.50</b>

**NOTES:**

- 1 - The cost to install a drain pipe and the cost of an open channel drain from the ground water control system to the canal to the east of the facility is about the same. Assume the pipe cost for financial assurance.
- 2 - Erosion control costs are derived from ECDC 2008 actual costs, adjusted for inflation. Acreage for slopes equals total acreage minus the top deck.



Exp. 3/31/13

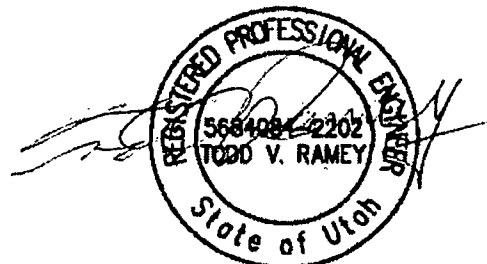
**TABLE 2  
WASATCH REGIONAL LANDFILL  
POST-CLOSURE COST ESTIMATES SUMMARY**

**LENGTH OF CLOSURE ACTIVITIES: 30 YEARS**  
**LANDFILL AREA: 73.7 ACRES**

<b>FINAL CLOSURE COSTS</b>						<b>COST/ YEAR</b>	<b>30-YEAR TOTAL</b>
Closure Certification <sup>(1)(4)</sup>						\$ 1,707.16	\$ 51,214.65
<b>MAINTENANCE COSTS<sup>(1)(4)</sup></b>							
Security, fencing, gates, signs, access, etc.						\$ 1,963.23	\$ 58,896.85
Erosion repair, settlement repair, revegetation						\$ 5,690.52	\$ 170,715.51
Surface water control maintenance (run-on/run-off)						\$ 2,845.26	\$ 85,357.76
Monitoring system maintenance, repair, replacement						\$ 1,138.10	\$ 34,143.10
Leachate collection system, repair, replacement						\$ 1,138.10	\$ 34,143.10
<b>Subtotal - Maintenance Costs</b>						<b>\$ 12,775.21</b>	<b>\$ 383,256.33</b>
<b>MONITORING COSTS<sup>(2)(3)(4)</sup></b>			<b># OF WELL/PTS</b>	<b># OF SAMPLES</b>	<b>FREQ/ YEAR</b>	<b>COST/ SAMPLE</b>	<b>COST/ YEAR</b>
<b>Groundwater</b>							
3rd Party/Sample Collection <sup>(3)</sup>			3	1	2	\$ 185.97	\$ 1,115.81
3rd Party/Statistical Analysis <sup>(3)</sup>			1	1	2	\$ 836.84	\$ 1,673.68
Lab Analysis			3	1	2	\$ 409.13	\$ 2,454.76
<b>Subtotal - Groundwater</b>						<b>\$ 5,244.25</b>	<b>\$ 157,327.40</b>
<b>Leachate Analysis</b>							
3rd Party/Sample Collection <sup>(3)</sup>			2	1	2	\$ -	\$ -
Lab Analysis (Bi-Annual for 10 years)			2	1	2	\$ 334.74	\$ 1,338.95
<b>Subtotal - Leachate Analysis</b>						<b>\$ 1,338.95</b>	<b>\$ 40,168.36</b>
<b>Landfill Gas</b>							
3rd Party/Operation and Maintenance <sup>(3)(5)</sup>			15	1	12	\$ 170.65	\$ 30,716.98
<b>Subtotal - Landfill Gas</b>						<b>\$ 30,716.98</b>	<b>\$ 460,754.68</b>
<b>Oversite Inspection</b>				<b>HRS/ INSPECT</b>	<b>FREQ/ YEAR</b>	<b>COST/ SAMPLE</b>	<b>COST/ YEAR</b>
3rd Party Oversight Inspections				4	4	\$ 104.89	\$ 1,678.31
<b>Subtotal - Oversight Inspection</b>						<b>\$ 1,678.31</b>	<b>\$ 50,349.19</b>
<b>TOTAL</b>						<b>\$ 53,460.84</b>	<b>\$ 1,143,070.61</b>

**NOTES:**

- 1 - Rates are based on the 2013 third-party dollars
- 2 - Surface water monitoring costs are not included due to no local surface water sources.
- 3 - Estimate reflects third-party semi-annual sample collection, lab analysis and statistical evaluation, monitoring and facility inspection, conducted together, when appropriate.
- 4 - All overhead for oversight and record keeping included within unit rates.
- 5 - The landfill gas operation and maintenance total cost is based on operating the system for 15 years.



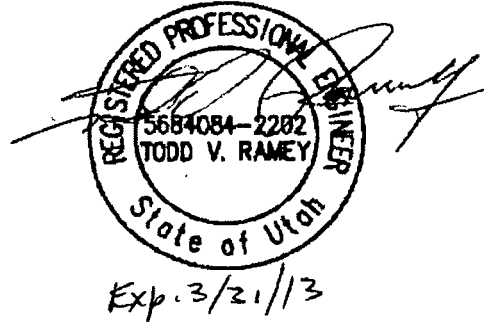
Exp. 3/31/13

**TABLE 3  
WASATCH REGIONAL LANDFILL  
CLOSURE/POST-CLOSURE CARE COST ESTIMATE**

<b>SIZE OF CLOSURE AREA:</b>	<b>73.7 ACRES</b>		
<b>TOTAL CLOSURE COSTS:</b>		<b>\$</b>	<b>2,122,750</b>
<b>TOTAL POST-CLOSURE COSTS:</b>		<b>\$</b>	<b>1,143,071</b>
<b>TOTAL CORRECTIVE ACTION COSTS:</b>		<b>\$</b>	<b>-</b>
<b>TOTAL COST ESTIMATE:</b>		<b>\$</b>	<b>3,265,821</b>

**NOTES:**

- 1 - Total Costs are reported in 2013 third-party dollars
- 2 - Includes gas collection and control system (GCCS).
- 3 - Corrective actions are currently not anticipated at the site



## WASATCH REGIONAL LANDFILL 2012 GAS MONITORING RESULTS

Location	Q1		Q2		Q3		Q4	
	Date	% LEL	Date	% LEL	Date	% LEL	Date	% LEL
West corner of the scale	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Inside of the scale house	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Inside the water purification equipment building	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Inside the shop	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Inside the office	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Southwest property line corner	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
South property line adjacent to the southwest corner of the existing landfill cell unit	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Southeast property line corner	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Northeast fence line corner	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0
Northwest fence line corner	3/29/2012	0	6/29/2012	0	9/28/2012	0	12/31/2012	0

Notes: Tests performed by Les Lemmon, Operations Manager, with an Industrial Scientific Corporation LEL monitor, model M40  
 Locations are specified in the DEQ approved Plan of Operations

*Les Lemmon*      1/11/13





## 2012 Health, Safety and General Training Schedule - BU 453

	Source	Training	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Fall Protection, Ladders and Walking Surfaces	AW S/M	All					5							
Fire Extinguishers	AW S/M	All								8				
Flammable & Combustible Liquids	AW S/M	All	1											
Grinders/Hand Tools/Machine Guarding	AW SM	All												12
Hot Work/Welding Operations	AW SM	All								8				
Jacks/Stands/Hook Inspections	AW SM	All	1											
Overhead Cranes/Slings/Chains	AW SM	All		2										
Pre-Trip/Post Trip - VCR's	Misc	All									9			
Preventive Maintenance	Misc	All												12
Tire Rim Safety	Misc	All					5							
Towing a Vehicle	Misc	All											11	

### Safety Standards and Republic Manuals

Cell Phones, Radios & Other Distractions	Stndrds	All				4								
Disposal Facility Safety Standard	Stndrds	All						6						
Employee Safe Work Practices Handbook	Manual	All			3									
Equipment Maintenance Manuals	LEM	Mngrs			3									
Facility & Vehicle Security	Stndrds	All					5							
Heavy Equipment Operators Manual	Manual	All			3									
High Visibility Clothing	Stndrds	All											11	
Housekeeping - Walking - Working	Stndrds	All										10		
Landfill Standards Manual	Manual	All			3									
Summer Safety Plan - Winter Weather Ckfst	Site Plan	All					5						11	
Temporary Labor	Stndrds	All										10		
Transfer Station Standards Manual	Manual	All			3									

### Smith System - 5 Keys

#1 Aim High in Steering	Plan	All	1						7					
#2 Get the Big Picture	Plan	All		2						8				
#3 Keep your eyes Moving	Plan	All			3						9			
#4 Leave Yourself an Out	Plan	All				4						10		
#5 Make Sure They See You	Plan	All					5						11	

### Other/Safety Topics

Cold Stress & PPE	Area Safety	All	1											
First Aid & CPR Training	Misc	All				4								
Fuel Awareness	Memo	All											11	
Heat Stress	Misc	All						6	7					
Mounting/Dismounting Equipment - 3 pnts	Area Safety	All				4								
Trenching & Excavating	Misc	All									9			

### ROPE - WCLF

Barrow Area Management Plan	Site Plan	All	1											
Bird Control Plan	Site Plan	All	1											
Communications Plan	Site Plan	All		2										
Community Relations Plan	Site Plan	All			3									
Customer Service - Complaint Log	ROPE	All				4								
Density Improvement Plan/Daily Cover	Site Plan	All					5							
Equipment Washing Procedures	LMM	All						6						
Facility Vegetation Plan	Site Plan	All							7					

## 2012 Health, Safety and General Training Schedule - BU 453

	Source	Training	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Fire Control Methods/Hot Loads	Site Plan	All								8				
Managing Overweight Loads	ROPE	Mngrs									9			
Odor Management Plan	Site Plan	All										10		
Operator Training Program - Documented	ROPE	All											11	
Push Offs, Pull Off's and Dig Outs	ROPE	All												12
Radiation Check & Alarm Procedures	Site Plan	All	1											
Safe Tipper Operation	ROPE	All		2										
Scavenging	Permit	All			3									
Signage Verification	ROPE	Mngrs				4								
Solidification SOP	Site Plan	All					5							
Special Waste Acceptance Procedures	SWMP	All						6						
Truck Towing	SAFE	All							7					

### Company Policy and Controls

Americans with Disabilities Act	HRS-101	All		2										
Attendance/Leave/Breaks	Area	All	1											
Bereavement Leave	HRS-102	All										10		
Bulletin Board Postings		Mngrs	1											
Budgets and Forecasts	Acct	Mngrs							7					
Business Ethics/Aware Line	G-101	Mngrs		2										
Capital Addition (CA) Form	Acct	Mngrs			3									
Capital Transfer (CT) Form	Acct	Mngrs					5							
Dress Code	HRS-105	All									9			
Drug & Alcohol Free Workplace	SFT-101	All												12
Employee Corrective Action	HRS - 109	All										10		
Environmental Compliance	ENG-101	Mngrs								8				
General Accounting - Lawson	Acct	Mngrs									9			
Levels of Authority	LGL-116	Mngrs												12
Meal Period Policy for Non-Exempt Emp	PAY-101	All							7					
Military Leave of Absence	HRS-108	Mngrs						6						
Month End Close	Acct	Mngrs											11	
Post Collection Operations	OPS-101	All				4								
Procurement Cards	PRO-105	Mngrs								8				
Reporting of Internal Control Breaches	IAD - 102	Mngrs						6						
Safety	SFT-102	All		2										
Sexual and Other Harassment	HRS-118	All			3									
Special Waste Management	ENG-102	All											11	
Travel & Reimbursable Business Expense	T&E-101	All				4								
Workplace Violence and Weapon	HRS - 110	All					5							

### Regulatory

DEQ Commerical Facility Inspection	Form	Mngrs		2				5						
Liner/Protective Cover Procedures	Plan	All					5							
DEQ Operating Plan/Permit	Plan	All								8				
Start Up, Shut Down & Malif Plan - Flare	Plan	Mngrs									9			