

**CITY OF ARLINGTON LANDFILL
TARRANT COUNTY – MSW PERMIT NO. 358B**

PART III – SITE DEVELOPMENT PLAN

**ATTACHMENT 9
CLOSURE AND POST-CLOSURE COST ESTIMATES**

Prepared for:



City of Arlington, Texas

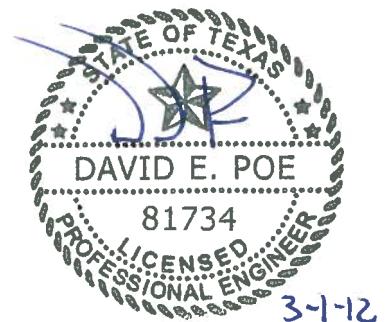
and:



Prepared by:



213 N. Oak Street
Roanoke, Texas 76262
(817) 490-8770
Texas Registration No. F-2578



Submitted March 2012



**CITY OF ARLINGTON LANDFILL
TARRANT COUNTY - MSW PERMIT NO. 358B**

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**ATTACHMENT 9
CLOSURE AND POST-CLOSURE COST ESTIMATES**

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1.0 COST ESTIMATE FOR FINAL CLOSURE

The following Closure and Post-Closure Cost Estimates Report presents the estimated costs for both closure and post-closure care of the City of Arlington Landfill.

Regulatory citations noted within the following report refer to corresponding sections of Title 30 of the Texas Administrative Code (30 TAC), Chapter 330.

In accordance with §330.503(a), the requirement is that the closure cost estimate represents the cost to close the largest waste fill area that could potentially be open in the year to follow and those areas that have not received final cover in accordance with the final closure plan. In accordance with §330.503(a)(2) and (3), the City of Arlington will revise the closure cost estimate (increase or decrease) annually as described below.

The estimated closure cost (in current dollars) to close the City of Arlington Landfill (Facility) is based on the cost of hiring a third party to close the Facility. The closure cost is presented in Table 9A.1 (Appendix 9-A).

The assumptions incorporated into the estimate are as follows:

- Closure will be required for Sectors 1 through 5 at the East Disposal Area (EDA), for a total area of approximately 160 acres. The acreage has been adjusted upward from the 2003 permit amendment application to accommodate the cell configuration changes incorporated into this permit amendment application.
- Sector 6 will not have been excavated, or can be regraded to drain with minor effort for the cost estimate. Limited soil placement will be required at Sector 6. Sector 6 also will be vegetated.
- Costs have been included for expansion of the gas collection system into areas of the EDA not covered by the current system (approximately 85 acres of new installation). Costs include wells (43), condensate sumps (2), piping and miscellaneous valving to connect the new wells to the existing gas collection system. A typical average cost of \$15,000 per acre has been used for the wellfield development, assuming a well density of approximately 1 well per 2 acres. A cost of \$350,000 also has been included for a new 4,000 cubic foot per minute utility flare and associated blower station and controls to be used in tandem or in place of existing blower/flare station, depending on gas production at time of closure and the condition of the existing system at the time of closure. Costs have been estimated to include contingency for elements such as valving, blower flare station site development, and other items that will be required based on the designs developed at the time of closure.
- A final cover comprised of Geosynthetic Clay Liner (GCL) and geomembrane will be used over Subtitle D areas (Sectors 2 through 5 at the EDA).

- A final cover comprised of GCL (only) will be used over the pre-Subtitle D area (Sector 1).

Note that the EWDA has not been incorporated into the closure cost estimate, as it has been assumed that the closure of Sectors 1 through 5 of the EDA (immediately prior to shifting waste placement activities to the EWDA) represents the largest area requiring closure until such a time that waste placement relocates to the EWDA (in 2020, or later). The closure cost estimate will be updated to address closure of portions of the EWDA prior to waste placement relocating from the EDA to the EWDA.

The cost estimates (with a revised estimate of the maximum area requiring closure, as necessary) will be revised and resubmitted to TCEQ with the annual financial demonstration, including updates, to coincide with waste placement relocating from the EDA to the EWDA.

1.1 Annual Review

The City of Arlington will review the closure cost estimate on an annual basis. Revisions will be made to the closure cost estimate as necessary.

An increase in the closure cost estimate and the amount of financial assurance provided will be made if changes in the closure plan or the landfill conditions increase the maximum cost of closure. An increase in financial assurance to cover an increase in the cost estimate will be made within 60 days of the approval of the revised cost estimate by the executive director.

A reduction in the closure cost estimate and the amount of financial assurance required may be allowed if the cost estimate exceeds the maximum cost of closure, and the City of Arlington provides written notice to the executive director and a detailed justification for the reduction of the closure cost estimate and the amount of financial assurance. The financial assurance will not be reduced until the revised closure cost estimate has been approved by the executive director.

An annual update of the closure cost estimate for inflation is also required as discussed below in Section 1.2.

1.2 Financial Assurance for Closure

In accordance with §330.503(b) and §37.111, the City of Arlington will provide continuous financial assurance coverage for closure until the Facility is officially placed under the post-closure maintenance period and all requirements of the closure plan have been approved in writing by the executive director.

In accordance with §37.131, during the active life of the Facility, the City of Arlington will adjust the cost estimate annually for inflation within 60 days prior to the anniversary of the



establishment of the financial instrument(s) used. The evidence of any additional financial assurance will be provided to the executive director within 30 days after the anniversary date of the first establishment of the financial assurance mechanism.

The adjustment may be made by recalculating the maximum cost of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in the Survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. Multiplying the closure cost estimate by the inflation factor makes the first adjustment. The result is the adjusted closure cost estimate. Multiplying the latest adjusted closure cost estimate by the latest inflation factor makes subsequent adjustments.

If a revised closure cost estimate is approved by the executive director prior to the annual inflation update, an additional update for inflation only is not required. The regular annual inflation update will resume the following year.

A copy of the current financial assurance instrument provided to TCEQ by the City of Arlington is provided in Appendix 9-C.

2.0 COST ESTIMATE FOR POST-CLOSURE CARE

The cost estimate to perform the post-closure care maintenance (as described in Part III, Attachment 8 of this Site Development Plan) is presented in Table 9B.1 (Appendix 9-B), and includes post-closure activities for post-closure care of the closed Sectors 1-5 at the EDA, mowing of the existing WDA, and continued operation and maintenance of the gas collection system at the WDA. The operation and maintenance costs for the gas collection system at the WDA have been estimated for the 17 years remaining in the post-closure period, assuming the landfill is closed in 2013 (for estimating purposes only). Operation and maintenance costs have been estimated based on a cost of \$1,500 per year for wellfield maintenance, and \$20,000 per year for the blower/flare station. An average annual energy cost of \$75,000 for the blower/flare station also is included, assuming all gas is incinerated.

The cost estimate is based upon hiring a third party to conduct post-closure care activities for the facility in accordance with Attachment 8, as required by §330.463(b)(3)(D) and §330.507. The estimate accounts for the total cost of conducting post-closure care for the largest area that could possibly require post-closure care in the year to follow, including annual and periodic costs as described in the post-closure plan over the entire post-closure care period. The breakdown of the cost estimate is presented in Appendix 9-B.

2.1 Annual Review

The City of Arlington will review the post-closure cost estimate on an annual basis. Revisions will be made to the post-closure cost estimate as necessary.

An increase in the post-closure care cost estimate and the amount of financial assurance provided will be made if changes in the post-closure care plan or the unit conditions increase the maximum costs of post-closure care. An increase in financial assurance to cover an increase in the cost estimate must be made within 60 days of the approval of the revised cost estimate by the executive director.

A reduction in the post-closure care cost estimate and the amount of financial assurance required may be allowed if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure period, and the City of Arlington provides written notice to the executive director of the detailed justification for the reduction of the post-closure cost estimate and the amount of financial assurance. The financial assurance will not be reduced until the revised post-closure cost estimate has been approved by the executive director.

An annual update of the post-closure cost estimate for inflation is required, as discussed in Section 2.2 below.

2.2 Financial Assurance for Post Closure

In accordance with §330.507(b) and §37.111, the City of Arlington will provide continuous financial assurance coverage for post-closure until the Facility is officially released in writing by the executive director from the post-closure care period.

In accordance with §37.131, during the active life of the Facility, the City of Arlington will adjust the cost estimate annually for inflation within 60 days prior to the anniversary of the establishment of the financial instrument(s) used. The evidence of any additional financial assurance will be provided to the executive director within 30 days after the anniversary date of the first establishment of the financial assurance mechanism.

The adjustment may be made by recalculating the maximum cost of post-closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in the Survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. Multiplying the post-closure cost estimate by the inflation factor makes the first adjustment. The result is the adjusted post-closure cost estimate. Multiplying the latest adjusted post-closure care cost estimate by the latest inflation factor makes subsequent adjustments.

If a revised post-closure cost estimate is approved by the executive director prior to the annual inflation update, an additional update for inflation only is not required. The regular annual inflation update will resume the following year.

In accordance with §330.63(j), a copy of the financial assurance documentation for post-closure care will be provided to TCEQ 60 days prior to the initial receipt of waste. A copy of the current financial assurance instrument as filed by the City of Arlington is included in Appendix 9-C. Future revisions to the financial assurance instrument will be maintained within the site operating record.

3.0 COST ESTIMATE FOR CORRECTIVE ACTION

In accordance with §330.509, a cost estimate based upon the City of Arlington hiring a third party to perform a corrective action program as required by §330.415 will be prepared and submitted as a permit modification to TCEQ, as necessary. The corrective action cost estimate will account for the total cost of corrective action activities as described in the corrective action plan for the entire corrective action period. Financial assurance will be provided for each separate corrective action program, as necessary.

3.1 Annual Review

The City of Arlington will review the corrective action cost estimate on an annual basis. Revisions will be made to the corrective action cost estimate as necessary.

An increase in the corrective action cost estimate and the amount of financial assurance provided will be made if changes in the corrective action program or unit conditions increase the maximum cost of corrective action. An increase in financial assurance to cover an increase in the cost estimate must be made within 60 days of the approval of the revised cost estimate by the executive director.

A reduction in the corrective action cost estimate and the amount of financial assurance required may be allowed if the cost estimate exceeds the maximum remaining cost of corrective action at any time during the remaining corrective action period, and the City of Arlington provides written notice to the executive director with a detailed justification for the reduction of the corrective action cost estimate and the amount of financial assurance. The financial assurance will not be reduced until the revised corrective action cost estimate has been approved by the executive director.

An annual update of the corrective action cost estimate for inflation is required as discussed below in Section 3.2.

3.2 Financial Assurance for Corrective Action

In accordance with §330.509(b) and §37.111, the City of Arlington will provide continuous financial assurance coverage for a corrective action program until the Facility is officially released in writing by the executive director from all requirements of the corrective action program after completion of all work specified in the corrective action plan.

In accordance with §37.131, during the active life of the Facility, the City of Arlington will adjust the cost estimate annually for inflation within 60 days prior to the anniversary of the establishment of the financial instrument(s) used. The evidence of any additional financial assurance will be provided to the executive director within 30 days after the anniversary date of the first establishment of the financial assurance mechanism.



The adjustment may be made by recalculating the maximum cost of the corrective action program in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in the Survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. Multiplying the corrective action cost estimate by the inflation factor makes the first adjustment. The result is the adjusted corrective action cost estimate. Multiplying the latest adjusted corrective action cost estimate by the latest inflation factor makes subsequent adjustments.

If a revised corrective action cost estimate is approved by the executive director prior to the annual inflation update, an additional update for inflation only is not required. The regular annual inflation update will resume the following year.

APPENDIX 9-A
CLOSURE COST ESTIMATE TABLES



9A-1 to 9A-5

**TABL-9A.1
CLOSURE COST ESTIMATE
CITY OF ARLINGTON LANDFILL
TARRANT COUNTY, TEXAS**

Prep'd by: DL
Check'd by: DML/CMT

Item No.	Cost Items	Estimated Quantities	Units	Approx. Unit Cost	Total Cost
	Engineering & Administrative (see Note 1)				
1	Topographic Survey	1	LS	\$5,940	\$5,940
2	Boundary Survey for Affidavit	1	LS	\$3,800	\$3,800
3	Site Evaluation	1	LS	\$17,810	\$17,810
4	Closure Plans and Specifications	1	LS	\$35,000	\$35,000
5	Landfill Gas System Plans and Specifications	1	LS	\$30,000	\$30,000
6	Contract Administration	1	LS	\$5,940	\$5,940
7	Administrative Costs	1	LS	\$5,940	\$5,940
8	QA Testing During Closure Construction	1	LS	\$47,500	\$47,500
9	Final Cover Evaluation Report	1	LS	\$23,750	\$23,750
	Engineering & Administrative Total				\$175,680
	Construction				
	Unfilled Landfill Area (Sector 6, 11 acres)				
10	Filling and Contouring to Drain (based on 1-foot soil over Sector 6)	17,740	CY	\$6.00	\$106,440
11	Vegetation	11	AC	\$4,000.00	\$44,000
	Pre-Subtitle D Area (Sector 1, 51.3 acres)				
12	Grading and Site Preparation (assumes .5' to be regraded)	248,224	SY	\$0.236	\$58,581
13	Geosynthetic Clay Liner (GCL) - Unreinforced (topslope)	652,885	SF	\$0.324	\$211,535
14	Geosynthetic Clay Liner (GCL) - Reinforced (sideslope)	1,581,131	SF	\$0.382	\$603,992
15	Drainage Geocomposite (sideslopes only) (double sided)	1,581,131	SF	\$0.347	\$548,652
16	Erosion Control Layer (12 inches)	82,741	CY	\$3.99	\$330,137
17	Vegetation	51.3	AC	\$4,000.00	\$205,200

**TABLL 9A.1
CLOSURE COST ESTIMATE
CITY OF ARLINGTON LANDFILL
TARRANT COUNTY, TEXAS**

Prep'd by: DE
Check'd by: DML/CMT

Item No.	Cost Items	Estimated Quantities	Units	Approx. Unit Cost	Total Cost
	Subtitle D Areas (Sectors 2 through 5, 108 acres)				
18	Grading and Site Preparation (assumes .5' regrading)	522,716	SY	\$0.236	\$123,361
19	Geosynthetic Clay Liner (GCL) - Reinforced (all areas)	4,704,444	SF	\$0.382	\$1,797,098
20	Geomembrane (40 mil LLDPE) - Textured (all areas)	4,704,444	SF	\$0.290	\$1,364,289
21	Drainage Geocomposite (sideslopes only) (double sided)	4,274,450	SF	\$0.347	\$1,483,234
22	Erosion Control Layer (12 inches)	174,239	CY	\$3.99	\$695,214
23	Vegetation	108	AC	\$4,000.00	\$432,000
	Final Cover Drainage Features				
24	Sideslope Diversion Berms	29,280	LF	\$10.00	\$292,800
25	Crest Diversion Berms	5,325	LF	\$10.00	\$53,250
26	Sideslope Gabion Downchutes	6,650	CY	\$300.00	\$1,995,000
27	Misc. Drainage Features	1	LS	\$30,000	\$30,000
	Landfill Gas Collection System Expansion				
28	Landfill Gas Wellfield, Piping, Valves, Sumps	83	AC	\$15,000	\$1,245,000
29	Landfill Gas Blower/Flare (4,000 cfm)	1	LS	\$350,000	\$350,000
	Construction Total				\$11,969,782
	Engineering and Administrative Total (from above)				\$175,680
	Contingency (15% of Construction Total)				\$1,795,467
	Closure Final Cost				\$13,940,929

Notes

- Unit rates shown in table from 2003 HDR Permit Amendment Application, multiplied by TCEQ annual CPI escalation factor for period 2003 through 2010.
- All units calculated on a horizontal plane basis, where applicable.
- SY = Square Yards CY = Cubic Yards LS = Lump Sum AC = Acres



Table 9A.2. Closure Cost Calculations Description

Project: City of Arlington Landfill Tarrant County, Texas Golder PN 073-9407711	Prep'd by: DEP Rev'd by: DML/CMT Apprv'd by: DEP	February 2012 Page 1 of 2
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- 1 Topographic Survey
Consists of aerial photographic mapping.
- 2 Boundary Survey for Affidavi
Estimate 2 days in field work plus office work
- 3 Site Evaluation
Consists of site visit and letter report summarizing waste disposal areas, drainage and erosion protection needs, and operational features that are not in compliance with the permit.
- 4 Closure Plans and Specifications
Final cover design and specifications, grading, drainage, and vegetation specifications, and NPDES permit.
Unit cost estimated based on experience with similar projects
- 5 Landfill Gas System Plans and Specification:
Design of remaining 83 acres of final cover not addressed by existing landfill gas collection system
Tie-in provided to existing piping and blower/flare station
Site development for new blower flare station assumed minimal, and at location of existing blower/flare station
- 6 Contract Administrator
Administration of construction contract
- 7 Administrative Costs
Invoice review and approval
- 8 QA Testing During Closure Construction
QA compaction testing of intermediate covers soils, and review of geosynthetic installation and testing.
- 9 Final Cover Evaluation Report
Preparation of final report certifying installation of final cover
- 10 Filling and Contouring to Drain (Sector 6)
Estimate assumes that Sector 6 is not built, and that area requires surface grading and some minor filling to achieve surface drainage. Filling volume assumed as 1 foot of soil across entire Sector 6 area.
- 11 Vegetation (Sector 6)
Vegetation of previously regraded Sector 6 area (approximately 11 acres)
- 12-17 Cover construction over Sector 1 (pre-Subtitle D area), including regrading, geocomposite cover, geocomposite drainage layer on sideslopes, 12-inch erosion control layer, and vegetation of surface. Areas used for calculations obtained from AutoCAD.
- 18-23 Cover construction over Sectors 2-5 (Subtitle D area), including regrading, geocomposite cover, geomembrane cover, geocomposite drainage layer on sideslopes, 12-inch erosion control layer, and vegetation of surface. Areas used for calculations obtained from AutoCAD.
- 24 Sideslope Diversion Berms
Construction of sideslope diversion berms on sideslope of landfill, based on lineal feet of berm constructed
- 25 Crest Diversion Berms
Construction of crest diversion berms at top of sideslope of landfill, based on lineal feet of berm constructed
- 26 Sideslope Gabion Downchutes
Construction of gabion downchutes, based on cubic yards of downchute installed, using a typical design of 10 channel bottom width, 3H:1V sideslopes and a 2-foot depth.



Table 9A.2. Closure Cost Calculations Description

Project: City of Arlington Landfill
Tarrant County, Texas
Golder PN 073-9407711

Prep'd by: DEP
Rev'd by: DML/CMT
Apprv'd by: DEP

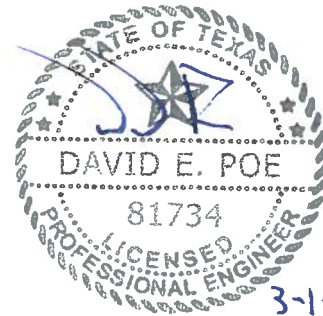
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27 Miscellaneous Drainage Features:

Construction of miscellaneous drainage features during closure, including downchute tie-ins, grading improvements at toe of landfill, and other miscellaneous items to be defined during final design.

28 Landfill Gas Wellfield, Piping, Valves, Sump:

APPENDIX 9-B
POST-CLOSURE COST ESTIMATE TABLES



PSS. 9B-1 To 9B-5

**TABLE 9B.1
POST-CLOSURE COST ESTIMATE
CITY OF ARLINGTON LANDFILL
TARRANT COUNTY, TEXAS**

Prep'd by: DEP
Check'd by: DML/CMT

Item No.	Cost Items	Estimated Quantities	Units	Units per year	Approx. Unit Cost	Annual Cost	Thirty-Year Cost
1	Site Post-Closure Plan Update	1	event	1	\$15,000	\$15,000	\$450,000
2	Site Inspections and Field Inspection Report to File	4	hours/month	12	\$80	\$3,840	\$115,200
3	Groundwater Monitoring System Costs Sampling and Analysis Costs of Groundwater Monitoring Wells	20	wells/event/year	2	\$500	\$20,000	\$600,000
4	Groundwater Monitoring System Maintenance	2	wells	See Table 9B.2	\$10,000	\$667	\$20,000
5	Other Environmental Monitoring Costs Surface Water Monitoring	1	event	2	\$500	\$1,000	\$30,000
6	Methane Gas Probe Monitoring	1	event	4	\$975	\$3,900	\$117,000
7	Leachate Management Costs - Subtitle D Facilities Leachate Collection System Maintenance	1	event	1	\$1,750	\$1,750	\$52,500
8	Leachate Disposal	11,704,014	gallon/yr	11,704,014	\$0.0034	\$39,794	\$1,193,809
9	Leachate Testing	1	event	2	\$1,000	\$2,000	\$60,000
10	Cover System Management Correctional Plans and Specifications	4	event	See Table 9B.2	\$5,000	\$667	\$20,000
11	Cover System Maintenance (EDA only)	1	event	See Table 9B.2	\$552,800	\$18,427	\$552,800
12	Mowing - EDA	160	acres	2	\$32	\$10,240	\$307,200

**TABLE 9B.1
POST-CLOSURE COST ESTIMATE
CITY OF ARLINGTON LANDFILL
TARRANT COUNTY, TEXAS**

Prep'd by: DEP
Check'd by: DML/CMT

Item No.	Cost Items	Estimated Quantities	Units	Units per year	Approx. Unit Cost	Annual Cost	Thirty-Year Cost
13	Mowing - EWDA	194	acres	2	\$32	\$12,416	\$372,480
14	Access Road Maintenance	1	annual	1	\$2,000	\$2,000	\$60,000
	Gas Collection System Maintenance						
15	Gas Field Maintenance (WDA) (17 years only)	112	per well, annual	1	\$1,500	\$168,000	\$2,856,000
16	Gas Field Maintenance (EDA)	88	per well, annual	1	\$1,500	\$132,000	\$3,960,000
17	Blower/Flare Station Maintenance	1	annual	1	\$20,000	\$20,000	\$600,000
18	Blower/Flare Station Utility Cost	1	annual	1	\$75,000	\$75,000	\$2,250,000
	Post-Closure Costs Subtotal			Annual Cost		\$526,700	
				30-year Cost			\$13,616,989
	Contingency (10% of Subtotal)					\$52,670	\$1,361,699
	Post-Closure Costs Final					\$579,370	\$14,978,688



Table 9B.2. Post Closure Cost Calculations Description

Project: City of Arlington Landfill
 Tarrant County, Texas
 Golder PN 073-9407711

Prep'd by: DEP
 Rev'd by: CMT
 Apprv'd by: DEP

February 2012
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OBJECTIVE: Estimate the cost of hiring a third party to conduct post-closure care activities for the largest area possibly requiring post-closure care in the year to follow, as described in plan.

- 1 Site Post-Closure Plan Update
 Update of post-closure plan to address changes or revisions to activities.
 Assumed one-time event.

- 2 Site Inspections and Field Inspection Report to File
 Monthly inspection of closed landfill by field technician, and filing of field report to site record.

- 3 Sampling and Analysis Costs of Groundwater Monitoring Wells
 Based on groundwater monitoring costs for facility, with additional cost for 3rd party labor added:

Cost =	\$500 per well / per event
Number of Wells =	20

- 4 Groundwater Monitoring System Maintenance
 Assume 10% of monitoring wells will need to be replaced during the post-closure period.

Estimate replacement cost of well =	\$10,000
Number of Wells =	2

- 5 Surface Water Monitoring
 2 sampling events per year, costs based on recent facility costs.

- 6 Methane Gas Probe Monitoring
 Quarterly monitoring

Unit Cost =	\$65 /probe
No. of Probes =	15
Cost =	\$975 per event

- 7 Leachate Collection System Maintenance
 The primary maintenance cost for the leachate collection system is repair and/or replacement of

Pump Cost =	\$2,000
Repair Cost =	\$500

Assume each pump requires repairs every	6 years
Assume each pump will be replaced	1 time during the post-closure period.

Repair/replacement cost =	\$4,500 per pump
Number of pumps =	5
Total Repair/replacement cost =	\$22,500

Assume additional maintenance costs (e.g., electrical, etc.) =	\$1,000 per year
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Total LCRS maintenance cost =	\$52,500
Yearly LCRS maintenance cost =	\$1,750



Table 9B.2. Post Closure Cost Calculations Description

Project: City of Arlington Landfill
 Tarrant County, Texas
 Golder PN 073-9407711

Prep'd by: DEP
 Rev'd by: CMT
 Apprv'd by: DEP

February 2012
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8 Leachate Disposal

A conservative value of 5,000 cf/ac/yr was used for the calculation. Post-closure leachate generation is expected to be less. Values from HELP model over estimate leachate generated for closed condition, based on general observations at similar landfills.

5,000 cf/acre/yr
 37,400 gal/acre/yr

Final Cover Area = 313 acres (over areas with LCRS)
 Leachate Production = 11,706,200 gal/yr

Unit Treatment cost at POTW = \$ 0.0034 /gal (based on current site services agreement)

9 Leachate Testing

Semi-annual leachate testing for submittal to the POTW

Unit Cost = \$1,000 /event

10 Correctional Plans and Specifications

Assume a plan required every 5 years for 1st 10 years and every 10 years thereafter.
 Estimated at \$5,000 per plan set.

11 Cover System Maintenance (EDA Only)

Unit revegetation cost = \$1,500 /acre
 Unit topsoil cost = \$3 /cy
 Select fill cost = \$3 /cy
 Final Cover Area = 160.0 acres

Assume cap repairs consist of the following:

25% of cover requires revegetation annually during years 1-5	\$300,000
10% of cover requires revegetation annually during years 6-10	\$120,000
2 revegetation events over 5% of cover between years 11-20	\$24,000
1 revegetation event over 5% of cover between years 21-30	\$12,000
6 inches of topsoil required over 10% of cover once between years 1-5	\$38,720
6 inches of topsoil required over 5% of cover once between years 6-10	\$19,360
Two 6-inch topsoil replacement events over 5% of cover from years 11-30	\$38,720

\$552,800

12, 13 Mowing

Assume final cover areas only to be mowed twice per year.

Unit cost = \$32 /acre, based on actual facility operational costs.

14 Perimeter Access Road Maintenance

Assume \$2,000 per year for years 1-30 for localized gravel addition and minor regrading of rutting

Gas Collection System Maintenance

15-17 Wellfield maintenance on acre basis, and annual assumed cost for blower/flare station

18 Assumed utility cost for blower/flare station operation.

APPENDIX 9-C

CURRENT CLOSURE COST ASSURANCE INSTRUMENT



March 15, 2010

Ms. Deborah Wisneski
Program Administrator
Financial Assurance Section, Mail Code 184
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Dear Ms. Wisneski:

I am the Director Financial and Management Services for the City of Arlington, Texas. This letter is in support of this local government's use of the financial test to demonstrate financial assurance, as specified in 30 Texas Administrative Code, (TAC), Chapter 37, (relating to Financial Assurance).

1. This local government is the owner or operator of the following facilities for which financial assurance for closure, post-closure or corrective action is demonstrated through the financial test specified in 30 TAC § 37.271 (relating to Local Government Financial Test). The current cost estimates covered by the test are shown for each facility:

City of Arlington Landfill	\$12,883,275	closure costs
TWC # 0358	\$ 2,583,063	post-closure costs
800 Mosier Valley Road		
Arlington, TX 76011		

2. This local government guarantees, through the guarantee specified in 30 TAC §37.281 (relating to Local Government Guarantee), the current closure, post-closure, or corrective action cost estimates of the following facilities owned or operated by the City of Arlington. The current cost estimates so guaranteed are shown for each facility:

None

The fiscal year of this local government ends on September 30, 2010. The figures for the following items marked with an asterisk are derived from this local government's independently audited, year-end financial statements for the latest completed fiscal year, ended September 30, 2009.

BOND RATING INDICATOR OF FINANCIAL STRENGTH

- | | |
|-----------------------------------|--------------|
| 1. Sum of current cost estimates: | |
| Closure costs | \$12,883,275 |
| Post-closure costs | \$ 2,583,063 |

2. List the following information on all the outstanding, rated, unsecured general obligation bonds issued to the local government:

Current bond rating of most recent issuance and name of rating service:
AA+ from Standard & Poor's, AA from Fitch, Inc. and Aa2 from Moody's Investors Services.

Date of issuance of bond: October 15, 2009

Date of maturity of bond: August 15, 2029

3. Environmental obligations assured by a financial test to demonstrate financial assurance in the following amounts under commission regulations and the Code of Federal Regulations (CFR) or state equivalent rules:

(a) Municipal Solid Waste under 30 TAC Chapter 330 and 40 CFR Part 258	
Closure costs	\$12,883,275
Post-closure costs	\$ 2,583,063
(b) Hazardous waste treatment, storage and disposal facilities under 30 TAC Chapter 335 and 40 CFR Parts 264 and 265	\$0
(c) Petroleum underground storage tanks under 30 TAC Chapter 334 and 40 CFR Part 280	\$0
(d) Underground Injection Control System facilities under 30 TAC Chapter 331 and 40 CFR Part 144	\$0
(e) PCB commercial storage facilities under 40 CFR Part 761	\$0
(f) Additional environmental obligations not shown above	\$0
Total (a)-(f)	\$15,466,338

*4. Total Annual Revenue \$846,455,000

Indicate either "yes" or "no" to the following question.

5. Is line 3 divided by line 4 less than or equal to 0.43? YES

I hereby certify that the wording of this letter is identical to the wording specified in 30 TAC §37.371 as such regulations were constituted on the date shown immediately below. I further certify the following: that the local government's financial statements are prepared in conformity with General Accepted Accounting Principles for governments, including conformance with General Accounting Standards Board Statement 18, and its financial statements have been audited by an independent Certified Public Accountant (CPA); that the local government has not operated at a deficit equal to 5.0% or more of total annual revenue in each of the past two fiscal years; that the local government is not in default on any outstanding general obligations bonds; that the local government does not have outstanding general obligations rated lower than Baa issued by Moody's or BBB as issued by Standard and Poor's; and that the local government has not received an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent CPA.



April Nixon
Director of Management and Financial Services

Dated: March 15, 2010

c: TCEQ Region 4
Nick Stefkovich, Area President, Republic Waste Services of Texas, Ltd.
Steve Cooke, City of Arlington Assistant Director of Public Works
Bob Weber, City of Arlington Solid Waste Lease Administrator

Enclosure: CAFR



Deloitte & Touche LLP
JPMorgan Chase Tower
2200 Ross Avenue, Suite 1600
Dallas, TX 75201-6778
USA
Tel: +1 214 840 7000
www.deloitte.com

INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

City Council
City of Arlington

We have performed the procedures enumerated below, which were agreed to by the City of Arlington (the "City"), solely to assist the City in evaluating the City's compliance with local government finance test requirements under Texas Administrative Code Title 30, Chapter 37, Rule 37.271 for the year ended September 30, 2009. The management of the City of Arlington is responsible for its compliance with such requirements. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of the Parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures that we performed and our findings are as follows:

1. We obtained and read the City's audited financial statements for each of the two years ended September 30, 2009 and September 30, 2008.
2. We noted that the City's financial statements for each of the years ended September 30, 2009 and 2008 were audited by an independent certified public accountant and that the auditors' report on the financial statements expressed an unqualified opinion that the financial statements were fairly presented in all material respects in accordance with accounting principles generally accepted in the United States of America.
3. We calculated the difference between the total annual revenues [total governmental funds revenues plus enterprise funds operating revenues plus enterprise funds non-operating revenues (net) plus internal service funds non-operating revenues (net)] and total annual expenditures [total governmental funds expenditures, other than capital project funds expenditures, plus enterprise funds operating expenses before depreciation plus enterprise funds non-operating expenses (net) plus internal service funds non-operating expenses (net)] as defined in section 37.271 (1)(D) of the Texas Administrative Code for the fiscal years ended September 30, 2009 and 2008 and noted that the City did not operate at a deficit (total annual revenues minus total annual expenditures) equal to 5.0% or more of total annual revenues in each of the past two fiscal years.
4. We noted that the City did not receive an adverse opinion, disclaimer of opinion, or other qualified opinion from the Independent Certified Public Accountant auditing its financial statements for each of the fiscal years ended September 30, 2009 and 2008.

Member of
Deloitte Touche Tohmatsu

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on the specified elements, accounts, or items. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the specified parties listed above and is not intended to be and should not be used by anyone other than these specified parties.

Deloitte & Touche LLP

March 15, 2010