



**A & M Engineering and
Environmental Services, Inc.**
Consulting - Design - Construction - Remediation

April 8, 2019

Ms. Amber Edwards
Environmental Programs Manager
Oklahoma Department of Environmental Quality
Land Protection Division
Solid Waste Compliance
707 North Robinson
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

**RE: Financial Strength Information and
Closure Post Closure Cost Adjustment
Grand River Dam Authority
Grand River Energy Center Landfill
Chouteau, Mayes County, Oklahoma
Solid Waste Permit No. 3549012**

Dear Ms. Edwards:

At the request of, and on behalf of the Grand River Dam Authority (GRDA), A & M Engineering and Environmental Services, Inc. (A & M Engineering) is herewith submitting Financial Strength Information to support utilization of the Corporate Financial Test as the mechanism for financial assurance of the above referenced landfill. This information is being submitted in accordance with the financial assurance adjustment requirements as found in OAC 252:515-27-34 of the Oklahoma Solid Waste Regulations. As you are aware, a request for extension of time for submittal of the required 2019 Annual Closure and Post-Closure Cost estimate for the facility had been requested from DEQ and approved.

Information being provided herewith includes:

- A demonstration of Financial Assurance for Closure and Post-Closure Costs, signed and Notarized by the GRDA Chief Financial Officer/Corporate Treasurer of GRDA;
- Independent Accountants' Report on Applying Agreed Upon Procedures;
- The Independent Auditor's Report embedded in the Financial Statements of GRDA; and
- The 2019 Worksheet for Calculating Closure and Post-Closure Cost Estimates (previously provided to DEQ)

Ms. Amber Edwards
April 8, 2019
Page -2-

As required, a copy of this information is being placed into the operating record for the facility. If you have any questions on this matter, or if you require any additional information, please do not hesitate to contact me at 918.665.6575 or at ttrebonik@aandmengineering.com.

Sincerely,
A & M Engineering and Environmental Services, Inc.



Thomas A. Trebonik, P.G.
Senior Project Manager

Enclosures

Cc: Ms. Carol Bartlett, DEQ, with Enclosures
Mr. Robert Ladd, GREC, w/o Enclosures
Mr. Mike Bednar, GRDA, with Enclosures
Ms. Maria Saucedo, GREC, w/o Enclosures
Mr. Doug Vore, GREC, w/o Enclosures



March 27, 2019

Ms. Carol Bartlett
Environmental Program Specialist
Land Protection Division
Department of Environmental Quality
P. O. Box 1677
Oklahoma City, Oklahoma 73101-1677

Dear Ms. Bartlett:

I am the Chief Financial Officer of the Grand River Dam Authority, an agency of the state of Oklahoma, with its principal place of business located in Vinita, Oklahoma. This letter is in support of this agency's use of the financial test to demonstrate financial assurance for closure and/or post-closure costs as specified in 27 A O.S. Sections 2-10-701(C)(6) and OAC 252:517-17.

This agency is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated in accordance with the Oklahoma Administrative Code and the Oklahoma Solid Waste Management Act. We have updated our estimates, and the current closure and/or post-closure cost estimates covered by the test are shown for each facility:

GRDA Units No. 1 and No. 2 Fly Ash Disposal	Closure	\$1,498,909.78
Chouteau, Oklahoma	Post-Closure	\$851,833.48

The effective date of the responses is for the fiscal year of this agency which ends on December 31, 2018. The figures for the following items marked with an asterisk are derived from this agency's independently audited, year-end financial statements for the latest completed fiscal year, ended 2018:

1. Sum of current closure and post-closure cost estimates: \$1,498,909.78 Closure and \$851,833.48 Post-Closure for a sum of \$2,350,743.26.
2. Current bond ratings of most recent issuance of this firm and name of rating service: A1 Moody's Investors Service, Inc., AA- Standard & Poor's Rating Services, A+ Fitch Ratings, Ltd.
3. Date of issuance of bond: August 30, 2017
4. Date of maturity of bond: 2021-2040
- *5. Tangible net worth: \$622,490,530



Ms. Carol Bartlett
March 27, 2019
Page 2

- *6. Total assets in United States: \$1,789,268,204
- 7. Is line 5 at least \$10 million? Yes
- 8. Is line 5 at least 6 times line 1? Yes
- 9. Are at least 90% of firm's assets located in the United States? Yes
- 10. Is line 6 at least 6 times line 1? Yes

I hereby certify that the representations made in this letter are, to the best of my knowledge, true and accurate.

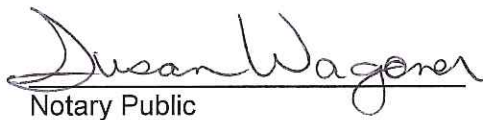
Date: 03/27/2019


Lorie Gudde
Chief Financial Officer/Corporate Treasurer

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
)
COUNTY OF CRAIG)

Before me, a Notary Public, in and for said county and state, on this 27th day of March, 2019, personally appeared Eddie Rothermel, AGM/Treasurer/Chief Financial Officer, to me known to be the identical person who executed the within and foregoing instrument.


Notary Public

My commission expires: 9-21-22



Independent Accountants' Report on Applying Agreed-Upon Procedures

To the Board of Directors
Grand River Dam Authority
Vinita, Oklahoma

We have performed the procedures enumerated below, which were agreed to by Grand River Dam Authority ("the Authority") and the Oklahoma Department of Environmental Quality ("DEQ"), solely to assist the Authority and the DEQ in evaluating the Authority's compliance with the financial test option as of December 31, 2018, included in the accompanying letter dated March 27, 2019, from Lorie Gudde, Chief Financial Officer and Corporate Treasurer of the Authority to Carol Bartlett, Environmental Program Specialist of the DEQ. 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 enumerated below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and the related findings are as follows:

- 1) We compared the tangible net worth amount included in item 5 of the letter referred to above with the corresponding ending net position balance in the basic financial statements of the Authority as of and for the year ended December 31, 2018 and noted that such amounts were in agreement.
- 2) We compared the total assets in United States amount included in item 6 of the letter referred to above with the corresponding total assets balance in the basic financial statements of the Authority as of and for the year ended December 31, 2018 and noted that such amounts were in agreement.
- 3) We multiplied the sum of closure and post-closure cost estimates in item 1 of the letter by 6 and noted that the tangible net worth amount in item 5 of the letter is greater than the product of this multiplication.
- 4) We multiplied the sum of closure and post-closure cost estimates in item 1 of the letter by 6 and noted that the amount of total assets in the United States of America included in item 6 of the letter is greater than the product of this multiplication.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA). We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on compliance regarding the accompanying letter dated March 27, 2019 and the information contained therein. 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 Authority and the DEQ, and is not intended to be, and should not be, used by anyone other than the specified parties.

Baker Tilly Virchow Krause, LLP

Madison, WI
April 4, 2019

Grand River Dam Authority

(A Component Unit of the State of Oklahoma)

Basic Financial Statements as of and for the
Years Ended December 31, 2018 and 2017
Required Supplementary Information (Unaudited)
and Independent Auditors' Report

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITORS' REPORT	1-2
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)	
Management's Discussion and Analysis (Unaudited)	3-17
BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017:	
Statements of Net Position	18
Statements of Revenues, Expenses, and Changes in Net Position	19
Statements of Cash Flows	20
Notes to Financial Statements	21-62
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—	63
Schedule of Proportionate Share of the Net Pension Liability— Oklahoma Public Employees Retirement Plan (Unaudited)	64
Schedule of Employer Contributions—Oklahoma Public Employees Retirement Plan (Unaudited)	64
Schedule of Proportionate Share of the Net Pension Liability—Oklahoma Law Enforcement Retirement Plan (Unaudited)	65
Schedule of Employer Contributions—Oklahoma Law Enforcement Retirement Plan (Unaudited)	65
Actuarial Information—Other Postemployment Benefits Plan— Schedule of Funding Progress (Unaudited)	66
Actuarial Information—Other Postemployment Benefits Plan— Schedule of Changes in Total OPEB Liability and Related Ratios For the Last 10 Fiscal Years (Unaudited)	67

INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Grand River Dam Authority
Vinita, Oklahoma

Report on the Financial Statements

We have audited the accompanying financial statements of Grand River Dam Authority, as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Grand River Dam Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Grand River Dam Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Grand River Dam Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Grand River Dam Authority as of December 31, 2018, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 1, the Grand River Dam Authority adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective January 1, 2018. Our opinion is not modified with respect to this matter.

The financial statements of the Grand River Dam Authority, as of and for the year ended December 31, 2017, were audited by other auditors whose report dated March 31, 2018, expressed an unmodified opinion on those statements.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
March 28, 2019

2019 Worksheet for Calculating Closure and Post-closure Cost Estimates

All site data necessary to calculate estimates of closure and post-closure costs can be gathered by completing Table H.1. Data from Table H.1 should be inserted into Tables H.2 and I.1 to complete calculations.

Table E.1 Site Data

Facility Name: Grand River Dam Authority

Permit Number: 3549012

Description	Quantity	Units
Total Permitted Area	67	acres
Active Portion		
Composite Lined	-	acres
Soil Lined	47	acres
Area of Largest Cell/Phase Requiring Final Cap		
Composite Lined	-	acres
Soil Lined	47	acres
Perimeter Fencing	-	linear feet
Groundwater Monitoring Wells	93	VLF
Methane Gas Probes	NA	VLF
Terraces	NA	linear feet
Letdown channels	NA	linear feet
Perimeter drainage ditches	NA	linear feet
Average Daily Flow	36.95	tons/day
Landfill Disposal Cost	-	\$/ton

VLF = Vertical linear feet. The sum of the depths of all monitoring wells.

Table H.2 Closure Cost Estimate

Facility Name: Grand River Dam Authority

Permit Number: 3549012

	Task/Service	Quantity	Units	Multiplier ^a	Unit Cost ^b	Subtotal
1	Preliminary Site Work					
1.1	Conduct Site Evaluation	1	Lump sum	1	\$3,680.28	\$3,680.28
1.2	Dispose Final Wastes					
	Average Daily Flow	36.95	tons/day			
	Disposal Cost	^d	tons/day	5 (5 days waste)	^e	NA

1.3	Remove Temporary Building(s)	1	lump sum	1	\$3,374.83	NA
1.4	Remove Equipment	1	lump sum	1	\$2,754.84	\$2,754.84
1.5	Repair/Replace Perimeter Fencing		linear feet	0.25	\$3.62	NA
1.6	Clean Leachate Line(s)	1	lump sum	1	\$1,666.90	NA
2	Monitoring Equipment					
2.1	Rework/Replace Monitoring Well(s)	93	VLF	0.25	\$77.39	\$1,799.32
2.2	Plug Abandoned Monitoring Well(s)	93	VLF	0.25	\$30.98	\$720.29
2.3	Rework/Replace Methane Probe(s)		VLF	0.25	\$66.84	NA
2.4	Plug Abandoned Methane Probe(s)		VLF	0.25	\$24.42	NA
2.5	Rework/Replace Remediation and/or Gas Control Equipment	1	lump sum	0.05		NA
3	Construction					
3.1	Complete Site Grading to include on- and off-site borrow areas	67	acres	1	\$1,459.14	\$97,762.38
3.2	Construct Final Cap					
	Compacted On-site Clay Cap or	151,653	cubic yards	1	\$5.25	\$796,180.00
	Compacted Off-site Clay Cap or	-	cubic yards	1	\$8.52	NA
	Install Geosynthetic Clay Liner Cap	-	square feet	1	\$0.55	NA
3.3	Construct Landfill Gas Venting Layer					

	Place Sand or		acres	1	\$39,015.75	NA
	Install Net and Geotextile		square feet	1	\$0.38	NA
3.4	Install Passive Landfill Gas Vents		acres	1	\$934.67	NA
3.5	Install Flexible Membrane		square feet	1	\$0.42	NA
3.6	Drainage Layer					
	Place Sand or		acres	1	\$39,015.75	NA
	Install Net and Geonet		square feet	1	\$0.38	NA
3.7	Place On-site Topsoil	75,827	cubic yards	1	\$2.25	\$170,610.00
	Place Off-site Topsoil	-	cubic yards	1	\$18.03	NA
3.8	Establish vegetative cover, including on- and off-site borrow areas	67	acres	1	\$925.83	\$62,030.61
4	Drainage/erosion control					
4.1	Construct Terraces		linear feet	1	\$9.44	NA
4.2	Construct Letdown Channels		linear feet	1	\$103.30	NA
4.3	Clean Perimeter Drainage Ditches		linear feet	0.50	\$7.19	NA
5	Tasks Not Identified					-
6	Subtotal					\$1,135,537.71
7	Administrative Services	1	lump sum	0.10	^g	\$113,553.77
8	Technical and Professional Services	1	lump sum	0.12	^g	\$136,264.53
9	Closure Contingency	1	lump sum	0.10	^g	\$113,553.77
10	Total Final Closure					\$1,498,909.78

- a. Multipliers are determined from the *Solid Waste Financial Assurance Program Report*, December 22, 2000.
- b. Unit costs include a 2.26% inflationary adjustment for 2019. Unit costs (Tasks 3.8 and 4.2) updated per 2015 5-year evaluation (OAC 252:515-27-4). Task 3.8 unit cost will increase \$132.26 each year through the 2020 update.
- c. New facilities: Insert the value for “W” in OAC 252:517-17-8(b). Existing facilities: Insert reported annual tonnage for the previous year, divided by 312 operating days per year (52 weeks per year x 6 operating days per week).
- d. Insert number of tons/day from above.
- e. Insert landfill disposal cost per ton of waste (\$/ton).
- f. Input capital cost for gas control/remediation equipment, if installed at the site.
- g. Input subtotal from line 6.
- h. Add rows 6 through 9.

Table I.1 Post-closure Cost Estimate**Facility Name: Grand River Dam Authority****Permit Number: 3549012**

	Task/Service	Quantity	Units	Multiplier^a	Unit Cost^b	Subtotal
1	Site maintenance					
1.1	Site Inspections	4	per year	30	\$669.48	\$80,337.60
1.2	General Maintenance	1	per year	30	\$2,007.15	\$60,214.50
1.3	Remediation and/or Gas Control Equipment	1	lump sum	0.3 ^c	^d	NA
2	Monitoring equipment					
2.1	Rework/Replace Monitoring Well(s)	93	VLF	0.25	\$77.39	\$1,799.32
2.2	Plug Abandoned Monitoring Well(s)	93	VLF	0.25	\$30.98	\$720.29
2.3	Final Plugging of Monitoring Wells	93	VLF	1	\$30.98	\$2,881.14
2.4	Rework/Replace Methane Probe(s)		VLF	0.25	\$66.84	NA
2.5	Plug Abandoned Probe(s)		VLF	0.25	\$24.42	NA
2.6	Final Plugging of Methane Probes		VLF	1	\$24.42	NA
2.7	Final Plugging of Piezometer(s)		VLF	1	\$24.42	NA
3	Sampling and analysis					
3.1	Groundwater Monitoring Wells	5	wells	60	\$721.89	\$216,567.00
3.2	Methane Gas Probes		probes	60	\$46.84	NA
3.3	Surface Water Monitoring Points		points	60	\$87.00	NA

3.4	Leachate		sample	60	\$140.19	NA
4	Final cover maintenance					
4.1	Mow and Fertilize Vegetative Cover	47	acres	30 yrs	\$221.47	\$312,272.70
4.2	Repair Erosion, Settlement, and Subsidence for On-site Soils	47	acres	60 yrs	\$3.21	\$9,052.20
	Repair Erosion, Settlement, and Subsidence for Off-site Soils		acres	30 yrs	\$19.20	NA
4.3	Reseed Vegetative Cover	47	acres	0.20	\$925.83	\$8,702.80
5	Leachate management					
A	Clean Leachate Line(s)	1	per year	30 (30 yrs)	\$1,716.74	NA
B	Maintain Leachate Collection System and Equipment	1	per year	30 (30 yrs)	\$2,667.02	NA
C	Collect, Treat, Transport, and Dispose of Leachate		gal/yr	30	\$0.34	NA
6	Tasks not identified					-
7	Subtotal					\$692,547.54
8	Administrative Services	1	lump sum	0.06	^f	\$41,552.85
9	Technical and Professional Services	1	lump sum	0.07	^f	\$48,478.33
10	Post-closure Contingency	1	lump sum	0.10	^f	\$69,254.75
11	Total Post-closure					\$851,833.48

- a. Multipliers are determined from the *Solid Waste Financial Assurance Program Report*, December 22, 2000.
- b. Unit costs include a 2.26% inflationary adjustment for 2019. Unit cost (Task 4.3) updated per 2015 5-year evaluation (OAC 252:515-27-4). Task 4.3 will increase \$132.26 each years through the 2020 update.
- c. 5% of equipment capital cost, maintenance performed once per 5 yrs for 30 years ($6 \times 0.05 = 0.30$)
- d. Input capital cost for gas control/remediation equipment, if installed at the site.
- e. If the approved groundwater monitoring plan requires monitoring for alternative constituents, unit

costs shall be calculated in accordance with OAC 252:517-17-52(b) or (c).

- f. Input subtotal from line 7.
- g. Add lines 7 through 10.