

September 10, 2014

Mr. Roger Doak,
Unit Leader
Hazardous Materials and Waste Management Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Dear Sir:

This is our response to fulfill three tests required to complete Denver Zoological Foundation's (DZF) State of Colorado Solid Waste Permit Financial Assurance for 2014 for the Waste to Energy Certificate of Designation Application.

The following are responses to the financial tests as detailed in Section 1.8.10(A). All figures are based on our most recent audit as of 12/31/2013. This audit was prepared by the independent auditing firm of Kundinger, Corder & Engle and represents an unqualified opinion.

Test 1: 1.8.10(A)(1) The owner must satisfy one of the following three conditions:

- (a) A current rating for its senior debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; or
- (b) A ratio of less than 1.5 comparing total liabilities to net worth; or
- (c) A ratio of greater than 0.10 comparing the sum of net income plus depreciation, and amortization, minus \$10 million, to total liabilities.

DZF satisfies (b) above, based on page 3 of the attached audit, "Statements of Financial Position".

Total Liabilities = \$5,645,009 Net Worth = \$14,495,136

\$5,645,009 / \$14,495,136 = 0.39

0.39 meets the requirement of having a ratio of less than 1.5

Test 2: 1.8.10(A)(2) The tangible net worth of the owner or operator must be greater than:

- (a) The sum of the current closure, post-closure care, corrective action cost estimates and any other environmental obligations, including guarantees, covered by a financial test plus \$10 million excepted as provided in paragraph 1.8.10(A)(2)(b) of this section
- (b) \$10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities on





the financial statements provided all of the closure post-closure care, and corrective action costs and any other environmental obligations covered by a financial tests are recognized as liabilities on the owners or operator's audited financial statements, and subject to the approval of the Department.

DZF satisfies (a) above. Please see the Exhibit I, "Certificate of Designation-Financial Assurance Plan." The tangible net worth is found on page 3 of our audit, "Statements of Financial Position".

Tangible Net Worth: \$14,495,136

Estimated Closure, Post-Closure Costs = \$96,529

Tangible Net Worth > (Closure Costs +\$10,000,000) \$14,495,136> \$10,096,529

Tangible net worth exceeds the requirement of closure costs plus \$10M by \$1,582,263 which meets this requirement.

Test 3: 1.8.10(A)(3) The owner or operator must have assets located in the United States amounting to at least the sum of the current closure, post-closure care, corrective action cost estimates and any other environmental obligations covered by a financial test described in paragraph 1.8.10(c) of this section.

All of DZF's \$20,140,145 assets per the 12/31/13 audit are held in the United States.

Assets in United States > Estimated Costs for Closure \$20,140,145 > \$96,529

All of DZF's assets are held in United States and are greater than the estimated closure costs; therefore, DZF meets this requirement.

Please accept this letter to satisfy our Corporate Financial Test for 2014.

Sincerely,

Janis Diamond Controller Denver Zoological Foundation

Attachments

Cc: Shannon Block, President/CEO
George Pond, Vice President for Design and Campus Management
Jennifer Hale, Director of Safety and Sustainability



EXHIBIT 1

WASTE TO ENERGY SYSTEM

CERTIFICATE OF DESIGNATION-FINANCIAL ASSURANCE PLAN

## **Financial Assurance Requirements**

Per the state's solid waste sites and facilities regulations 6 CCR 1007-2, Part 1, section 1.8 Financial Assurance Criteria, the owner or operator of any solid waste disposal site/facility shall maintain in written documented form current cost estimates for hiring a third party to close such a site and facility and to conduct post closure care of such site/facility. The owner or operator of any solid wastes disposal site and facility shall establish financial assurance sufficient to ensure payment of such costs. No solid wastes disposal site/facility shall operate without being in compliance with these financial assurance requirements. The ultimate responsibility for financial assurance rests with the owner of the facility, however, the operator or lessee may provide financial assurance for the facility under these rules, if approved.

Denver Zoo has developed the following detailed cost estimate for the following actions as part of the closure and post closure plan for the site.

- 1. Disposition of waste associated with the Waste to Energy system
- 2. Disposition of equipment inventory from the site
- 3. Actions for remediation or clean-up of the site

These estimates will be used to determine the best financial mechanism to financially assure full payment. The mechanisms available to DZF include: trust fund, letter of credit, surety bond, insurance, corporate financial test, local government financial test, corporate guarantee, state approved mechanism such as certificate of deposit, multiple financial mechanisms, or other methods as approved.

### Material information:

## Dry material volumes -

Maximum Storage of Materials at Waste Management Building

Size of storage	Material density (lb/ft3)	Fill %	Volume (ft3)	Total Weight (lbs)
Dozing Bunker 1	20	80%	345.60	6,912
Dozing Bunker 2	35	50%	224.00	7,840
Dozing Bunker 3	35	50%	224.00	7,840
Dozing Bunker 4	35	50%	224.00	7,840



Pelletizer infeed hopper	15	80%	144.00	2,160
Pellet storage	55	80%	288.00	15,840
Approximate total			1,449.60	48,432
Ash Approximate storage	30	80%	1600.00	48,000
Total			3,049.60	96,432

## **Cost Estimates**

# **Dry Waste Materials**

Estimates provided by ET Technologies Inc. and Waste Management for disposal at DADs

Description	Volume	Rate	Total
Load, Transport and dispose of ash in landfill	60 cubic yard	\$40/cubic yard	\$2,400.00
Load Transport and dispose of process waste stored in equipment	54 cubic yard	\$40/cubic yard	\$2,160.00
Landfill Disposal Fee	114 cubic yard	\$8.50/cubic yard	\$969.00
		Subtotal	\$5,529.00

# Fluids in equipment

Disposal/draining of glycol/water mix in large storage tanks, heat exchangers, etc. (E.T. Technologies)

Description	Volume	Rate	Total
Recycle the water glycol mix	20,000 gallons	\$1.15/gallon	\$23,000.00
		Subtotal	\$23,000.00

Maintenance/storage/disposal of used gear oil and hydraulic fluid (E.T. Technologies)

Description	Volume	Rate	Total
Gather and contain fuels and	100 gallons	\$450/drum	\$900
haul to recycler			
Tars/liquids/acids	825 gallons	\$400/drum	\$6,600
		Subtotal	\$7,500.00

# **Equipment Removal**





# See attached quote from Fine Construction

Description		Extended Price
Disassemble all equipment in waste management facility. Labor and tools		\$43,000.00
Trucking within 50 miles		\$9,200.00
Equipment Rental	\$8,300.00	
	Subtotal	\$60,500.00

Total Project Costs	\$96,529.00
Total Project Costs	\$30,323.00

#### **Financial Assurance Calculations:**

Closure and post-closure cost estimates are adjusted annually for inflation until closure is completed. Since a dollar this year is not worth as much as a dollar last year.

The Department of Commerce, Bureau of Economic Analysis (BEA), publishes an official figure, called the Implicit Price Deflator (IPD), which summarizes what a certain group of goods and services costs during that year. An owner and operator can then use the IPD to determine how much prices "went up" (the inflation factor) and make a percentage adjustment to the previous year's closure and post-closure cost estimates.

Owners and operators must still adjust cost estimates following any changes in scope to their closure or post-closure plan that would raise the costs involved.

The annual adjusted number should use the estimated closure-cost of \$96,529 in 2014.

Estimates shall be annually adjusted using the implicit price deflator for the GDP as published on www.bea.gov.

### Other resources:

http://www.deq.state.or.us/lq/pubs/forms/sw/financialassurance/StraightInflationAdjustmentMemo.pdf of Special Projects Manager

