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FILED[3]

JAN 5 2007

Missouri Public
Service Commission

January 5, 2007

Ms. Colleen Dale, Secretary
Public Service Commission
PO Box 360
Jefferson City, MO 65102

RE: Becker v. Aqua Missouri, Inc.; Case No's. SC-2007-0044 and SC-2007-0045

Dear Ms. Dale:

Please find enclosed for filing on behalf of Jason Becker and Becker Development Company, LLC, complainants, the original and eight (8) copies of complainants' Rebuttal Testimony.

Thank you for your attention and should you have any questions please call.

Sincerely,

HENDREN ANDRAE, LLC

Keith A. Wenzel
kwenzel@hendrenandrae.com

KAW:rh
c: Marc Ellinger
Kevin Thompson
Lewis R. Mills, Jr.
Jason Becker
Enclosure

Exhibit No.:
Issue: Lagoon Volume Confirmation
Witness: Thomas P. Wells
Sponsoring Party: Jason Becker and Becker Development Company, LLC
Type of Exhibit: Rebuttal Testimony
Case No.: SC-2007-0044, et al.
Date Testimony Prepared: November 29, 2006

MISSOURI PUBLIC SERVICE COMMISSION

JASON BECKER and BECKER DEVELOPMENT COMPANY, LLC

REBUTTAL TESTIMONY

OF

THOMAS P. WELLS

BECKER v. AQUA MISSOURI, INC.

CASE NO. SC-2007-0044

CONSULTING ENGINEERS

TRABUE, HANSEN & HINSHAW, Inc.

1901 Pennsylvania
Columbia, MO 65202

November 29, 2006

Mr. Jason Becker
Becker Development Company
9723 Nine Hills Lane
Centertown, MO 65023

RE: Lake Carmel Lagoon Volume Confirmation

Dear Jason:

Enclosed is the report on lagoon volume done from the measurement taken by Terry Thurman.

As you will note, the depths are shallower than anticipated or noted from prior available information. This may be due to siltation over the years. The surface area of the cells is very close to the design data we had in the beginning.

The document recommends a method to restore the volume so the full permitted capacity is available. Adjusting the outlet pipe from each cell to raise water levels by 1.1 feet will accomplish this. Fill must also be used to raise the berms, because state regulations require 2' of freeboard.

Please let me know if you will need further information.

Sincerely,

TRABUE, HANSEN & HINSHAW, INC.

Thomas P. Wells, PE
Senior Project Engineer

573-814-1568
Fax: 573-814-1128

Lake Carmel Lagoon Volume Confirmation
For
Jason Becker

From available data, the lagoon configuration was assumed to be as follows:

- First cell: 0.70 acre cell, with operating depth of 5 feet.
- Second cell: 0.33 acre cell, with operating depth of 4 to 5 feet.
- Third cell: 0.12 acre cell, with operating depth of 4 feet.
- The total volume in system: approximately 1,779,000 gallons
- Permitted flow: 12,600 gallons per day

Since none of the above figures had been confirmed by actual measurement, it was necessary to visit the site and take accurate soundings and area measurements . Volume was confirmed by soundings across each cell, along with perimeter measurements. Positions of all soundings and points were established using GPS equipment. Soundings were done using a flat-bottom probe to prevent penetration of any seal layer. Some sludge presence beneath the probe base is possible, and the depths noted may be slightly conservative.

The calculated volume, based on confirmed areas and average depths, is 1,108,468 gallons at present. This translates to a maximum flow at 120 days detention time of 9,237 gallons, which is below the permitted figure of 12,600 gallons per day. A total of 1.24 Acre-Feet or 404,027 Gallons in additional volume is needed to provide for 12,600 gpd.

The surface area of the system totals 1.123 Acres. Addition of 1.1 feet of depth can provide the capacity needed. In order to do this, it will be necessary to modify the outlet pipes from each cell, and to raise freeboard accordingly. The length and slope of the entering line should be sufficient to allow this amount of increase.

The freeboard currently available at the cells is as follows:

(Assumed datum: Top of effluent pipe from cell #1 to cell #2 = 100.00)

Cell #1: Water surface elevation = 99.63
Lowest berm elevation = 101.00
Current freeboard = 1.37 feet

Cell #2: Water surface elevation = 99.23
Lowest berm elevation = 100.83
Current freeboard = 1.60 feet

Cell #3: Water surface elevation = 99.16
Lowest berm elevation = 100.75
Current freeboard = 1.59 feet

10 CSR 20-8 requires a 2 foot freeboard. Some earthwork is needed to bring the cells into compliance even without volume increase. However, raising the water surface by 1.1 feet to provide increased volume will result in the following:

Cell #1: Current water surface elevation = 99.63
Desired water surface elevation = 100.73
Lowest Current berm elevation = 101.00
Fill for 2' freeboard = 1.73 feet

Cell #2: Current water surface elevation = 99.23
Desired water surface elevation = 100.33
Lowest current berm elevation = 100.83
Fill for 2' freeboard = 1.50 feet

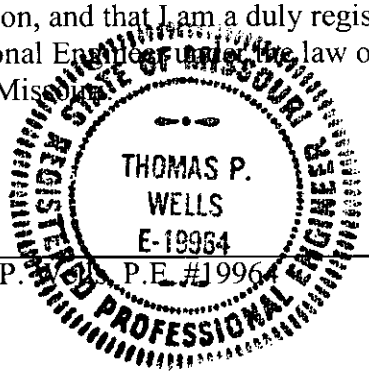
Cell #3: Current water surface elevation = 99.16
Desired water surface elevation = 100.26
Lowest current berm elevation = 100.75
Fill for 2' freeboard = 1.51 feet

Summary: Verified cell volumes are low, probably due to sludge accumulation and siltation. Modification of the cells to raise level and provide proper volume and freeboard can be done by adjusting the outlet pipe elevations and raising the berm elevations. Placement of new compacted clay fill should be done by first stripping the vegetation from the berm surfaces and then laying up new compacted clay fill in lifts not exceeding 6 inches.

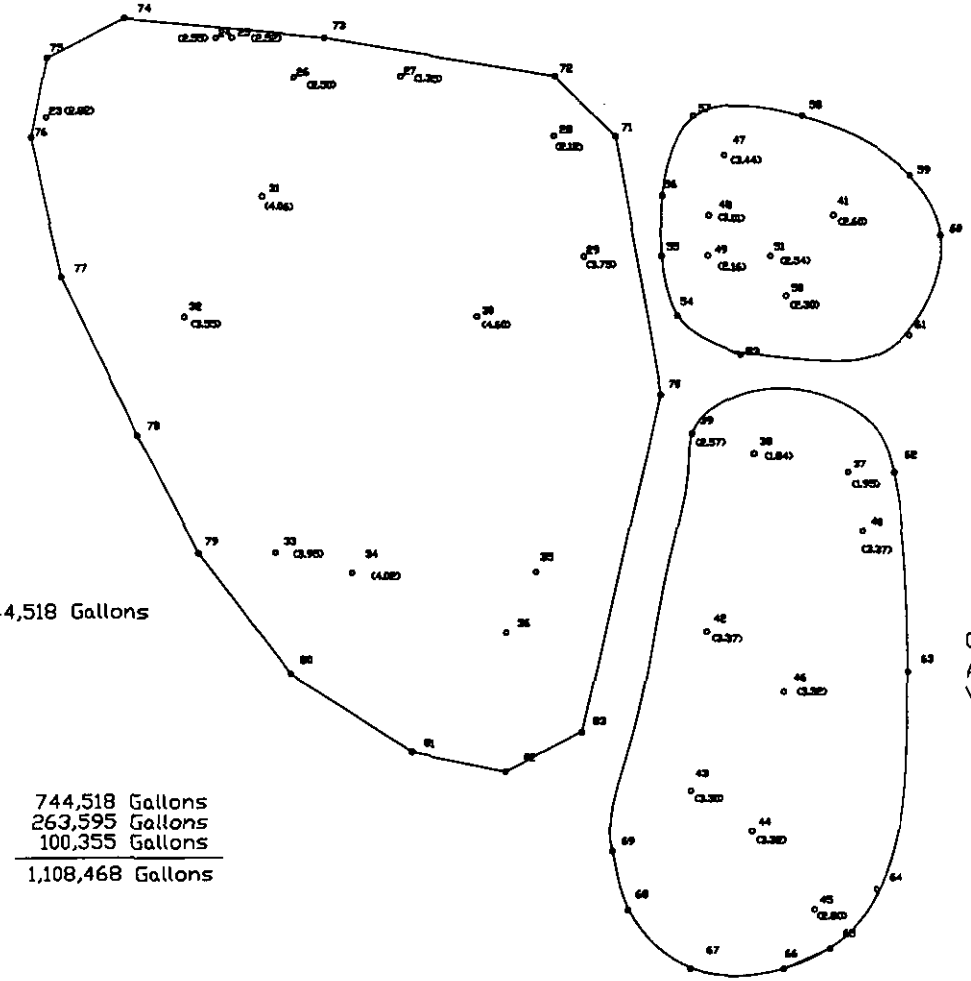
Field activity was conducted by Terry Thurman of Trabue, Hansen & Hinshaw, Inc.

Attached location and depth data and plots were prepared from the field data provided by Mr. Thurman.

I certify that this calculation and report were prepared by me or under my direct supervision, and that I am a duly registered Professional Engineer under the law of the State of Missouri.



Thomas P. Wells, P.E. #19964 Date



CELL #1 Area = 0.726 Acres
Average Depth = 3.147 feet
Volume = 2.285 Acre-Feet = 744,518 Gallons

CELL #3 Area = 0.115 Acres
Average Depth = 2.675 feet
Volume = 0.308 Acre-Feet = 100,355 Gallons

CELL #2 Area = 0.282 Acres
Average Depth = 2.869 feet
Volume = 0.809 Acre-Feet = 263,595 Gallons

744,518 Gallons
263,595 Gallons
100,355 Gallons
1,108,468 Gallons

GPS point	northing	easting	depth
22	96.24	495.51	offsite
23	368.94	345.27	2.82
24	393.18	396.91	2.55
25	393.18	401.61	2.52
26	381.06	420.38	2.50
27	381.06	453.25	1.35
28	362.88	500.20	2.12
29	326.52	509.59	3.75
30	308.34	476.73	4.60
31	344.70	410.99	4.06
32	308.34	387.52	3.55
33	235.62	415.69	3.95
34	229.56	439.16	4.02
35	229.56	495.51	no data
36	211.38	486.11	no data
37	259.86	589.41	1.95
38	265.92	561.23	1.84
39	271.98	542.45	2.57
40	241.68	594.10	3.37
41	338.64	584.71	2.60
42	211.38	547.15	3.37
43	162.90	542.45	3.30
44	150.78	561.23	3.32
45	126.54	580.02	2.80
46	193.20	570.63	3.32
47	356.82	551.84	3.44
48	338.64	547.15	3.01
49	326.52	547.15	2.16
50	314.40	570.63	2.30
51	326.52	565.93	2.54
52	344.70	589.41	Perimiter

GPS point	northing	easting	depth
53	290.16	556.54	Perimiter
54	308.34	537.76	Perimiter
55	326.52	533.07	Perimiter
56	344.70	533.07	Perimiter
57	368.94	542.45	Perimiter
58	368.94	575.32	Perimiter
59	350.76	608.19	Perimiter
60	332.58	617.57	Perimiter
61	302.28	608.19	Perimiter
62	259.86	603.49	Perimiter
63	199.26	608.19	Perimiter
64	132.60	598.80	Perimiter
65	114.42	584.71	Perimiter
66	108.36	570.63	Perimiter
67	108.36	542.45	Perimiter
68	126.54	523.68	Perimiter
69	144.72	518.98	Perimiter
70	284.10	533.07	Perimiter
71	362.88	518.98	Perimiter
72	381.06	500.20	Perimiter
73	393.18	429.78	Perimiter
74	399.24	368.74	Perimiter
75	387.12	345.27	Perimiter
76	362.88	340.57	Perimiter
77	320.46	349.96	Perimiter
78	271.98	373.44	Perimiter
79	235.62	392.21	Perimiter
80	199.26	420.38	Perimiter
81	175.02	457.95	Perimiter
82	168.96	486.11	Perimiter
83	181.08	509.59	Perimiter

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Jason Becker & Becker Development Inc.,	)	
Complainant,	)	
	)	**Case No. SC-2007-0044**
vs.	)	
Aqua Missouri, Inc.	)	
Respondent.	)	
Jason Becker & Becker Development Inc.,	)	
Complainant,	)	
	)	**Case No. SC-2007-0045**
vs.	)	
Aqua Missouri, Inc.	)	
Respondent.	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that Rebuttal Testimony for Complainants' Jason Becker and Becker Development Company, LLC were served by mailing a true copy thereof, this 5 day of January, 2007, by prepaid United States mail to: Kevin Thompson, General Counsel's Office, PO Box 360, 200 Madison Street, Ste. 800 Jefferson City, MO 65102; Lewis R. Mills, Jr. PO Box 2230, 200 Madison Street, Ste. 650, Jefferson City, MO 65102; and Marc Ellinger, 308 E. High Street, Ste. 301, Jefferson City, MO 65101.

Respectfully submitted,

HENDREN ANDRAE, LLC

Keith A. Wenzel, 33737
221 Bolivar Street
P.O. Box 1069
Jefferson City, MO 65102
(573) 636-8135

Attorneys for Complainants

CERTIFICATE OF SERVICE

I hereby certify that Rebuttal Testimony for Complainants' Jason Becker and Becker Development Company, LLC, were mailed on January 5th, 2007, by prepaid United States mail to: Kevin Thompson, General Counsel's Office PO Box 360, 200 Madison Street, Ste. 800 Jefferson City, MO 65102; Lewis R. Mills, Jr. PO Box 2230, 200 Madison Street, Ste. 650, Jefferson City, MO 65102; and Marc Ellinger, 308 E. High Street, Ste. 301, Jefferson City, MO 65101.