

Exhibit No.: BJH 64
Issues: Rate Increase/CIRP/Consent Decree
Witness: Billie S. LaConte
Sponsoring Party: Barnes-Jewish Hospital
Type of Exhibit: Surrebuttal Testimony
Case No.:
Date Testimony Prepared: August 19, 2011

Metropolitan St. Louis Sewer District

2011 Wastewater Rate Change Proceeding

**Before the
MSD Rate Commission**

**Surrebuttal Testimony of
Billie S. LaConte**

**on Behalf of
Barnes-Jewish Hospital**



DRAZEN CONSULTING GROUP
Energy & Regulatory Economics

Project No. 101479
August 19, 2011

1 **Metropolitan St. Louis Sewer District**

2 **MSD Rate Commission**
3 **2011 Wastewater Rate Change Proceeding**

4 **Surrebuttal Testimony of Billie S. LaConte**

5 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

6 **A** Billie S. LaConte, 8000 Maryland Avenue, Suite 1210, St. Louis, Missouri 63105.

7 **Q ARE YOU THE SAME BILLIE S. LACONTE THAT FILED REBUTTAL TESTIMONY IN THIS**
8 **PROCEEDING?**

9 **A** Yes.

10 **Q WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS PROCEEDING?**

11 **A** I shall discuss the Consent Decree and how it relates to MSD's proposed CIRP program
12 and MSD's rate proposal.

13 **Q WHAT ARE YOUR COMMENTS REGARDING THE CONSENT DECREE?**

14 **A** The infrastructure improvements and upgrades that MSD must complete to comply with
15 the Consent Decree (CD) cost less than the Capital Improvement and Replacement
16 Program (CIRP) amount that MSD claims it needs. The CD requires approximately
17 \$884.7 million of investment, whereas MSD claims it needs \$1.0 billion to meet the CD
18 requirements.

1 **Q PLEASE EXPLAIN.**

2 A MSD Exhibit 49A is the Final MSD Consent Decree. It discusses “the infrastructure
3 improvements and upgrades required to eliminate or reduce overflows from Combined
4 and Separate Sewer Systems in order to improve water quality and protect human
5 health and the environment.” MSD Exhibit 50, described as the Supplemental Response
6 to the Second Discovery Request of the Missouri Industrial Energy Consumers, includes
7 an attachment, Exhibit 50A, that “is a detailed list of projects which are anticipated to
8 be a part of the current Rate Proposal. Exhibit MSD 50A may be used to link the CD to
9 rate proposal table 3-8, page 3-14, line 12 and table 3-9, page 3-15, line 9 of the Rate
10 Proposal.” MSD Exhibit 50A lists each project, by fiscal year, along with the cost of each
11 project. The total is \$884.7 million, whereas MSD Exhibit 1, Table 3-8, Page 3-14 and
12 Table 3-9, Page 3-15 shows a total cost of \$1.0 billion for the same time period.

13 **Q WHY DO THESE FIGURES DIFFER?**

14 A MSD uses an “appropriation method” to fund its capital projects instead of a cash
15 expenditures method. This results in an extra \$34 million over the rate proposal period
16 (FY2013-FY2016) (Exhibit MSD 18A4 “Cash Flow vs. Appropriation”).

17 **Q ARE THE FIGURES IN MSD EXHIBIT 50A THE SAME AS THOSE PROVIDED IN MSD**
18 **EXHIBIT 9B1?**

19 A Yes. However, at the time that MSD Exhibit 9B1 was provided, intervenors and the Rate
20 Commission did not have access to the Consent Decree and, therefore, were not able to

1 confirm whether the CIRP in the rate proposal matched the requirements of the
2 Consent Decree.

3 **Q WHAT IS THE BENEFIT OF USING THE “CASH METHOD” INSTEAD OF THE**
4 **“APPROPRIATION METHOD?”**

5 A It is more accurate and results in somewhat lower increases. As Rate Commission
6 witness William Stannard stated in his rebuttal testimony, “many large wastewater
7 systems I have worked with have moved from financing their capital improvement
8 programs on an appropriation basis to a cash expenditure basis to help mitigate the
9 associated rate increases and to recognize that capital project schedules often take
10 longer than initially anticipated” (Rebuttal Testimony of William Stannard, Page 10,
11 Lines 17–20).

12 **Q WHAT ASSUMPTIONS DOES MSD MAKE REGARDING THE TIMING OF CAPITAL**
13 **EXPENDITURES?**

14 A The footnote on MSD Exhibit 18A41 shows MSD’s proposed CIRP on a cash flow basis
15 versus appropriation. The footnote states that “Projects over 12 months are assumed
16 to have 60 percent of the costs expended in the first fiscal year with the remaining 40
17 percent spent in the following fiscal year.” MSD assumes that its capital projects will be
18 completed within two years, which results in customers paying more up-front for capital
19 projects that may not be completed during the specified years and/or rate period.

1 **Q DO YOU RECOMMEND THAT MSD SWITCH TO A CASH EXPENDITURE BASIS?**

2 A Yes. If MSD uses a cash expenditure basis, its proposed rate increases for the rate
3 period could be lowered by 3% per year.

4 **Q HOW DID YOU DETERMINE THIS?**

5 A Using data that is available, I analyzed MSD's rate proposal and calculated the needed
6 rate increases to meet MSD's operating costs, maintain appropriate fund balances and
7 meet debt payment ratios.

8 **Q DID YOU DO THIS USING MSD'S RATE MODEL?**

9 A No. MSD's consultant (Black & Veatch) will not make its model available for analysis by
10 others. Even MSD does not have access to the model. This makes it very difficult to
11 check its accuracy. MSD and the intervenors were not able to reach agreement on the
12 confidentiality agreement related to accessing the rate model. Therefore, I prepared
13 and used a model that I created.

14 **Q WHAT ASSUMPTIONS DID YOU USE?**

15 A The assumptions I used are:

- 16 • MSD's customer count and usage would remain the same throughout the
17 rate period. (MSD assumed that customer accounts would decline by 0.2%
18 over the rate period and that usage would decline by 1.9% over the rate

1 period. MSD Exhibit 1, Table 3-1 and Table 3-2, respectively.) MSD Exhibit
2 11A34 shows that actual FY2011 customers and usage increased by 0.3% and
3 2.3%, respectively, over forecast 2011. Based on this data, assuming no
4 growth is a conservative estimate;

- 5 • Operating costs would increase 2.3% per year, excluding Rate Commission
6 costs, Additional Operating and Maintenance costs, and Civil Service
7 Commission costs, which remain the same as proposed in MSD's Rate
8 Proposal. This is based on Exhibit 18G titled "MSD's Inflation Trend
9 Analysis," which shows the average Consumer Price Index (CPI) from FY2006-
10 FY2012 as 2.3%;
- 11 • I used a cash expenditure method to estimate the annual CIRP costs, based
12 on Exhibit MSD 50A and an inflation allowance of 1.5% (using 2010 \$). The
13 inflation allowance is lower than the CPI rate to reflect that some of the bids
14 for capital work may come in below traditional costs;
- 15 • Based on the lower CIRP requirements, I lowered the revenue bond issuance
16 from \$805 million to \$727 million over the rate period and maintained the
17 State Revolving Loan proceeds as shown in MSD's Rate Proposal; and
- 18 • I used a bad debt expense escalator of 3% per year instead of MSD's 32% for
19 FY2013 and 12% for FY2014-FY2016. This is based on the assumption that
20 MSD's improved collection methods will mitigate somewhat the effect of the
21 rate increases on bad debt expense.

1 Q **WHAT RATE INCREASES WOULD MSD NEED USING YOUR ASSUMPTIONS?**

2 A MSD would need to increase rates by 8.5%, per year, for the rate period FY2013-FY2016.

3 MSD has proposed 11%-12% annual increases. Schedules BSL1-BSL5 provide the
4 detailed calculations.

5 Q **SHOULD MSD USE YOUR MODEL TO DETERMINE THE APPROPRIATE RATE INCREASES?**

6 A MSD should use the Black and Veatch Model with my inputs to determine the
7 appropriate rate increases. The model I used is an analysis to show that MSD, by
8 switching to a cash expenditure basis and modifying its growth assumptions and
9 inflation assumptions, could implement lower rate increases over the rate period while
10 still meeting the requirements of the CD.

11 Q **DOES THAT CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

12 A Yes.

Comparison of Projected Wastewater Revenue Under Existing Rates w/ Projected Revenue Requirements

Line	Description	2011	2012	2013	2014	2015	2016
1	Revenue using current rates	213,795.6	213,795.6	213,795.6	213,795.6	213,795.6	213,795.6
	Additional revenue required						
2	2012 4.3%		9,193.2	9,193.2	9,193.2	9,193.2	9,193.2
3	2013 8.5%			18,954.0	18,954.0	18,954.0	18,954.0
4	2014 8.5%				20,565.1	20,565.1	20,565.1
5	2015 8.5%					22,313.2	22,313.2
6	2016 8.5%						24,209.8
7	Total additional revenue	-	9,193.2	28,147.3	48,712.4	71,025.6	95,235.4
8	Total service charge revenue	213,795.6	222,988.8	241,942.9	262,508.0	284,821.2	309,031.0
9	Other operating revenue	(750.5)	3,382.4	3,244.2	3,114.6	2,984.2	2,851.8
10	Connection fee revenue	1,250.0	1,288.0	1,327.0	1,367.0	1,408.0	1,450.0
11	Interest income reserve funds	888.8	964.3	1,196.6	1,486.6	1,753.5	1,969.1
12	Interest income operations	30.8	47.3	50.1	50.5	50.5	50.2
13	Interest income Arnold	650.7	631.0	610.5	589.1	566.8	543.6
14	Subtotal other revenue	2,069.8	6,313.0	6,428.4	6,607.8	6,763.0	6,864.7
15	Total revenue	215,865.4	229,301.8	248,371.2	269,115.8	291,584.2	315,895.7
16	Operation and maintenance expense	134,394.8	138,803.8	141,996.2	145,262.1	149,078.2	152,021.2
17	Additional O & M	-	-	112.4	2,159.8	7,484.1	7,942.5
18	Net revenue	81,470.6	90,498.0	106,262.6	121,693.9	135,021.9	155,932.0
	Debt Service						
19	Existing senior revenue bonds	19,291	19,291	19,551	19,686	19,834	19,973
20	Proposed senior revenue bonds	-	3,579	19,061	32,134	44,656	53,601
21	Total senior revenue bonds	19,291	22,870	38,611	51,820	64,491	73,574
22							
23	Existing state revolving fund loans	19,114	21,311	21,401	21,484	21,356	21,729
24	Proposed state revolving fund loans	-	1,711	4,063	6,308	8,553	10,798
25	Total state revolving fund loans	19,114	23,022	25,464	27,791	29,909	32,526
26	Commercial paper	-	-	-	-	-	-
27	Total debt service	38,404	45,892	64,075	79,611	94,399	106,100
28	Routine annual improvements	2,379	2,462	2,519	2,576	2,636	2,696
29	Cash financing of major improvements	37,250	38,438	31,677	33,267	38,308	55,850
30	Additions to operating reserve	675	739	1,126	1,418	1,674	975
31	Net annual balance	2,763.2	2,967.6	6,865.5	4,821.6	(1,994.8)	(9,689.3)
32	Beginning of year balance	1,696.9	4,460.1	7,427.7	14,293.2	19,114.8	17,120.0
33	End of year balance	4,460.1	7,427.7	14,293.2	19,114.8	17,120.0	7,430.7
	Actual debt service						
34	Senior bonds	19,291	22,870	38,611	51,820	64,491	73,574
35	SRF loans	19,114	23,022	25,464	27,791	29,909	32,526
36	Debt service coverage						
37	Revenue bonds 1.25x	4.22	3.96	2.75	2.35	2.09	2.12
38	Total debt 1.15x	2.12	1.97	1.66	1.53	1.43	1.47

Wastewater Capital Improvement and Replacement Program
(\$000)

<u>Line</u>	<u>Description</u>	Inflation rate: 1.5%						2013-2016
		<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
<u>Sanitary Sewer Overflow Control</u>								
1	Design	12,410	707	43,478	39,184	40,969	16,859	140,491
2	Construction	54,931	17,570	76,387	66,346	106,710	130,016	379,458
3	Subtotal	67,341	18,277	119,865	105,530	147,679	146,874	519,949
<u>Combined Sewer Overflow Control</u>								
4	Design	13,415	5,131	23,266	11,675	15,782	15,636	66,360
5	Construction		2,142	14,336	38,082	47,131	12,575	112,124
6	Subtotal	13,415	7,273	37,603	49,757	62,913	28,211	178,484
<u>System Projects</u>								
7	Cityshed Improvements	6,283	-	19,651	11,144	7,972	7,107	45,875
8	Asset Management	15,697	22,562	57,068	49,584	24,939	33,880	165,471
9	B & C System	-	-	3,934	4,389	-	-	8,323
10	Subtotal	21,980	22,562	80,653	65,117	32,911	40,988	219,669
11	Wastewater Treatment	55,487	79,200	33,317	265	1,616	-	35,199
12	Total (inflated cash expense)	158,223	127,312	271,438	220,669	245,119	216,073	953,300

Exhibit 50A							2013-2016
<u>Sanitary Sewer Overflow Control</u>		<u>2012 *</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
	Design	686	41,579	36,919	38,030	15,418	131,946
	Construction	17,054	73,050	62,510	99,055	118,905	353,519
	Subtotal	17,741	114,629	99,429	137,085	134,323	485,465
<u>Combined Sewer Overflow Control</u>							
	Design	4,981	22,250	11,000	14,650	14,300	62,200
	Construction	2,079	13,710	35,880	43,750	11,500	104,840
	Subtotal	7,060	35,960	46,880	58,400	25,800	167,040
<u>System Projects</u>							
	Cityshed Improvements	-	18,793	10,500	7,400	6,500	43,193
	Asset Management	21,900	54,575	46,717	23,150	30,985	155,427
	B & C System	-	-	-	-	-	-
	Wastewater treatment	76,876	31,862	250	1,500	-	33,612
	Total	123,577	255,819	203,776	227,535	197,608	884,737

* 2012 figures are from MSD Exhibit 1, Table 3-8, adjusted to reflect 1.5% inflation, assuming MSD used 3% inflation.

Wastewater Capital Improvement Program Financing

Table 3-9

<u>Line</u>	<u>Description</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2013-2016</u>
Source of Funds								
1	Beginning of Year Balance	92,977.3	8,668.6	7,841.3	11,451.2	34,013.6	29,647.0	
2	Revenue Bond Proceeds	-	52,020.0	225,000.0	190,000.0	182,000.0	130,000.0	727,000.0
3	State Revolving Loan Proceeds	37,000.0	39,999.3	35,000.0	35,000.0	35,000.0	35,000.0	140,000.0
4	Commercial Paper	-	-	-	-	-	-	-
5	Cash Financing of Construction	37,250	38,438	31,677	33,267	38,308	55,850	159,102.0
6	Grants & Contributions a)	455	475	1,495	516	539	562	3,111.7
7	Interest Income b)	2,769	2,121	2,735	2,409	2,204	1,832	9,180.0
8	Total Funds Available	170,451.0	141,721.2	303,748.2	272,643.5	292,064.2	252,890.9	1,038,393.7
		77,474						
Application of Funds								
9	Major Capital Improvements	158,223.0	127,312.3	271,438.4	220,669.4	245,119.3	216,072.9	953,300.0
10	Improvement Fund Projects c)	1,265.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	8,000.0
11	Issuance Costs d)	552.2	988.3	3,377.5	2,887.5	2,775.5	2,047.5	11,088.0
12	Revenue Bond Reserve Fund e)	1,742.2	3,579.3	15,481.1	13,073.0	12,522.5	8,944.7	50,021.2
13	Total	161,782.4	133,879.9	292,297.0	238,629.9	262,417.3	229,065.0	1,022,409.2
14	End of Year Balance	8,668.60	7,841.33	11,451.21	34,013.64	29,646.95	23,825.84	15,984.51

Notes:

- a) Same as MSD Exhibit 1, table 3-9, line 6.
b) Same as MSD Exhibit 1, table 3-9, line 7. Notes from MSD Exhibit state that interest is 1% of the average of the beginning and end year fund balances; was not able to match MSD's figures based on this description, therefore used same figures.
c) Used same figures as in MSD Exhibit 1, Table 3-9, line 10.
d) Calculated using MSD description in MSD Exhibit 1, Table 3-9, footnote c.
e) Represent 6.88% of revenue bond proceeds, line 2.

Projected Wastewater Operating Expense (\$000)

Inflation rate: 2.3%

<u>Line</u>	<u>Description</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Increase 2012-2106</u>	<u>%</u>
								\$	%
1	Board of trustees	\$2.4	\$2.5	\$2.6	\$2.6	\$2.7	\$2.7	0.2	9.5%
2	Rate commission	423.8	9.4	9.7	10.1	485.6	11.1	1.7	18.1%
3	Civil service commission	7.8	7.8	7.8	7.8	7.8	7.8	-	0.0%
4	Secretary-treasurer	1,613.7	1,674.9	1,713.4	1,752.8	1,793.1	1,834.4	159.5	9.5%
5	Executive director	712.4	739.6	756.6	774.0	791.8	810.0	70.4	9.5%
6	General counsel	4,116.8	4,265.3	4,363.4	4,463.8	4,566.4	4,671.5	406.2	9.5%
7	Office of human resources	9,847.6	10,303.0	10,540.0	10,782.4	11,030.4	11,284.1	981.1	9.5%
8	Engineering	18,206.4	18,992.3	19,429.1	19,876.0	20,333.1	20,800.8	1,808.5	9.5%
	<u>Operations</u>								
9	Collection system	\$19,579.2	\$20,401.2	20,870.4	21,350.4	21,841.5	22,343.9	\$1,942.7	9.5%
10	Pump stations	7,931.3	8,210.8	8,399.6	8,592.8	8,790.5	8,992.7	781.9	9.5%
11	Wastewater treatment	35,427.5	36,664.6	37,507.9	38,370.6	39,253.1	40,155.9	3,491.3	9.5%
12	Support	7,265.0	7,534.8	7,708.1	7,885.4	8,066.8	8,252.3	717.5	9.5%
13	Total	\$70,203.0	\$72,811.4	\$74,486.1	\$76,199.2	\$77,951.8	\$79,744.7	6,933.3	9.5%
14	Finance	\$15,885.7	\$15,985.7	16,353.4	16,729.5	17,114.3	17,507.9	\$1,522.2	9.5%
15	Information systems	8,470.5	8,780.1	8,982.0	9,188.6	9,400.0	9,616.2	836.1	9.5%
16	Subtotal (general fund)	\$129,490.1	\$133,572.0	\$136,644.1	\$139,786.9	\$143,477.1	\$146,291.2	\$12,719.2	9.5%
17	Water backup program	\$4,000.0	\$4,300.0	4,398.9	4,500.1	4,603.6	4,709.5	\$409.5	9.5%
18	Real property fund	904.7	931.8	953.2	975.2	997.6	1,020.5	88.7	9.5%
19	Subtotal O&M	\$134,394.8	\$138,803.8	\$141,996.2	\$145,262.1	\$149,078.2	\$152,021.2	\$13,217.4	9.5%
20	Additional O&M (exp. Reg. projects)	-	-	112.4	2,159.8	7,484.1	7,942.5	\$7,942.5	N/A
21	Total O & M	\$134,394.8	\$138,803.8	\$142,108.6	\$147,421.9	\$156,562.3	\$159,963.7	\$21,159.9	15.2%
22	Routine annual improvements	2,378.6	\$2,461.9	2,518.5	2,576.4	2,635.7	2,696.3	\$234.4	9.5%
23	Total Operating Expense	\$136,773.4	\$141,265.7	\$144,627.1	\$149,998.4	\$159,198.0	\$162,660.0	\$21,394.3	15.1%

Wastewater Other Operating Revenue

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Billing adjustment	4,556,700	4,538,700	4,535,500	4,545,600	4,559,000	4,575,100
Bad debt provision	(10,910,900)	(6,820,800)	(7,025,424)	(7,236,187)	(7,453,272)	(7,676,870)
Other fees						
Construction inspection fees	100,000	103,000	106,100	109,300	112,600	116,000
Waste hauler permits	1,450,000	1,457,300	1,464,600	1,471,900	1,479,300	1,486,700
All other fees	482,500	497,100	512,100	527,500	543,300	559,600
Subtotal	2,032,500	2,057,400	2,082,800	2,108,700	2,135,200	2,162,300
Miscellaneous revenue	3,571,200	3,607,100	3,651,300	3,696,500	3,743,300	3,791,300
Total other operating revenue	(750,500)	3,382,400	3,244,176	3,114,613	2,984,228	2,851,830
Connection fee revenue	1,250,000	1,288,000	1,327,000	1,367,000	1,408,000	1,450,000
Total other revenue	499,500	4,670,400	4,571,176	4,481,613	4,392,228	4,301,830