



1 **Witness Background and Experience**

2 Q1. Please state your name, business address, and telephone number.

3 A. Brian L. Hoelscher, 2350 Market Street, St. Louis, Missouri 63103,  
4 (314) 768-6204.

5 Q2. What is your occupation?

6 A. I am the Director of Engineering for the Metropolitan St. Louis Sewer District (District).

7 Q3. How long have you been associated with the District?

8 A. I have been with the District continuously since 1995.

9 Q4. What is your professional experience?

10 A. I started my career with the District in May of 1995 as Manager of Construction. In  
11 November of 1997 I was promoted to the Assistant Director position in the Construction  
12 Management Department. In June of 2000, I was promoted to the Assistant Director of  
13 Engineering in charge of the Program Management Division when the Construction  
14 Management Department and the Environmental Compliance Department was merged  
15 with the Engineering Department. I was promoted to my present position of Director of  
16 Engineering on November 11, 2003. Prior to joining the District, I spent six years with a  
17 national consulting engineering firm, serving as the office manager for the last three of  
18 those years, preceded by seven years with the St. Clair County, Illinois Highway  
19 Department.

20 Q5. What is your educational background?

21 A. I am a graduate of Washington University in St. Louis with a Bachelor of Science degree  
22 in Civil Engineering.

23 Q6. Are you registered as a Professional Engineer?

1 A. Yes, I am a registered Professional Engineer in the states of Missouri and Illinois.

2 **Criteria Governing Rate Change**

3 Q7. How will the Proposed Rate Change enhance the District's ability to provide adequate  
4 sewer and drainage systems and facilities or related services?

5 A. The Proposed Rate Change will provide the funds needed to continue the District's  
6 Wastewater Capital Improvement and Replacement Program and the delivery of  
7 wastewater operation and maintenance services.

8 **Wastewater Capital Improvement and Replacement Program**

9 Q8. What is the size of the CIRP reflected in the Rate Proposal?

10 A. \$1.0 Billion over the four fiscal years 2013 – 2016.

11 Q9. Does the District have a list of projects that comprises the CIRP reflected in the Rate  
12 Proposal?

13 A. Yes. A list of projects is included in my direct testimony as MSD Exhibit No. 3B1

14 Q10. Have wastewater capital improvements been delayed recently due to lack of funding?

15 A. While MSD had to make program adjustments over the last 5 years to timely address  
16 changing regulatory requirements, the program as essentially conceived was completed.

17 Q11. What is the basis for the Wastewater Capital Improvement and Replacement Program  
18 shown in Table 3-9 of the Rate Proposal (MSD Exhibit No. 1) and schedules contained in  
19 the Wastewater Rate Increase section of the Rate Proposal (MSD Exhibit No. 1)?

20 A. The program is designed to meet the anticipated regulatory requirements and schedules  
21 for the period FY 2011 through FY 2016.

22 Q12. Does the District have the resources to successfully manage, construct, and complete the  
23 \$1.3 Billion Wastewater Capital Improvement and Replacement Program within the six-

- 1 year period, fiscal years 2011 – 2016, presented in the Rate Proposal?
- 2 A. Yes. As of the start of Fiscal Year 2012, the District will have completed the
- 3 reorganization of the Engineering Department to be able to manage the anticipated
- 4 program. In addition, necessary adjustments to the engineering consultant delivery model
- 5 have been made to assure cost-effective and timely completion of the program.
- 6 Q13. How much of the Wastewater Capital Improvement and Replacement Program is
- 7 regulatorily required?
- 8 A. All of it is required to comply with State and Federal requirements.
- 9 Q14. If the Proposed Rate Change is not implemented, will the District be able to construct all
- 10 of the federally mandated programs?
- 11 A. No.
- 12 Q15. Are all of the Wastewater Capital Improvement and Replacement Program projects
- 13 necessary?
- 14 A. Yes.
- 15 Q16. Do all of the improvement projects shown in the Wastewater Capital Improvement and
- 16 Replacement Program need be constructed in the six-year study period or could some of
- 17 the projects be delayed?
- 18 A. Both the scope and timing of all the projects in the Wastewater Capital Improvement and
- 19 Replacement Program are designed to meet regulatory requirements and schedules
- 20 anticipated base on the current status of the EPA mediation. Any delays could result in
- 21 fines or penalties due to system failure or inability to meet regulatory deadlines.
- 22 Q17. How are projects for the Wastewater Capital Improvement and Replacement Program
- 23 selected?

1 A. Projects are selected first for their level of potential impact on the environment. Then  
2 projects are scheduled based on the scheduling and sequencing constraints that are  
3 indicative of a linear infrastructure. For example, a significant amount of downstream  
4 capacity may need to be constructed before a regulatory capacity issue can be addressed  
5 in the upper part of the system. In some cases, schedules are also affected by resource  
6 requirements, such as the need to stagger large tunnel projects so that sufficient tunnel  
7 contracting resources are available to perform any amount of work being executed at any  
8 given time.

9 Q18. How are costs for the Wastewater Capital Improvement and Replacement Program  
10 determined?

11 A. For sewer work, cost estimates are based on historical District bid prices using conceptual  
12 and preliminary design information. For facility work, estimates are based on the  
13 technical expertise of consulting engineers and past bid data on similar District projects.

14 Q19. If the wastewater rates and bond authorization are not increased, what is the magnitude of  
15 the costs for projects within the four-year study period could potentially need to be  
16 delayed?

17 A. The anticipated four-year program from FY 2013-2016 with a successful wastewater rate  
18 increase is \$1.0 billion as shown on Table 3-8, Line 12 of the Rate Proposal (MSD  
19 Exhibit No. 1). Without a successful wastewater rate increase, the cash available from the  
20 existing rate for projects can be inferred from Table 3-9, Line 5 as being approximately  
21 \$160 million. Therefore, approximately \$840 million in projects would need to be  
22 delayed.

23 Q20. How successful has the District been in meeting the budget and schedule of prior

1 Wastewater Capital Improvement and Replacement Programs?

2 A. The District is scheduled to successfully complete the Wastewater Capital Improvement  
3 and Replacement Program for FY 2008-2012 as laid out in the previous rate proposal.

4 This was done while successfully addressing two major issues. The first was the addition  
5 of unanticipated regulatory requirements to be addressed by the Wastewater Capital  
6 Improvement and Replacement Program. The requirement that had the biggest impact  
7 was the construction of disinfection facilities at all of the District's Treatment Plants that  
8 do not currently have disinfection facilities. These facilities have a regulatory deadline to  
9 be completed no later than December 31, 2013. Planning and design resources were  
10 diverted from addressing collection system issues to address the disinfection requirement.

11 The other major issue was the downturn in the economy. Because of this economic  
12 condition, the District was receiving bids for capital work that in some cases was 40%  
13 below traditional costs. This created additional funds which could be used to complete  
14 projects beyond the original program budget. Unfunded "contingency" projects were  
15 designed and annually approved by the District's Board of Trustees. These projects  
16 assured that the District would be able to use all additional capital funds, including  
17 American Recovery and Reinvestment Act (ARRA) stimulus dollars, available due to the  
18 economic conditions and allowed the District to recover some projects that were  
19 previously delayed from the original program to fund the construction of disinfection  
20 facilities.

21 Q21 What are the key components of the District's CIRP?

22 A. The program will address sanitary sewer overflows (SSO's) in our separate sanitary  
23 sewer system, combined sewer overflows (CSO's) in the combined sewer system, the

1 impacts of surcharging combined sewers in Citysheds located within the County and the  
2 City of St. Louis, mandatory upgrades to our treatment plants, and projects to provide  
3 infrastructure renewal and to address other capacity issues within the entire collection  
4 system as part of a comprehensive Asset Management Program.

5 Q22. Are SSO and CSO considered illegal?

6 A. SSO's are illegal and need to be eliminated. CSO's are not illegal. However, as mandated  
7 by Federal requirements, MSD submitted a Long Term Control Plan (LTCP) update in  
8 August 2009, to mitigate the impact of the CSO's on water quality with the goal of  
9 meeting water quality standards. This plan is currently under review by the Missouri  
10 Department of Natural Resources.

11 Q23. How many SSOs does the District need to eliminate?

12 A. As of May 2011, the District has 185 known remaining constructed SSO's. These all  
13 need to be removed. It is the District's goal to eliminate all other SSOs.

14 Q24. How many CSO's does the District need to abate?

15 A. As of February 2011, the District has 199 remaining permitted CSO's. While a few of  
16 these will be removed, most will be abated by either constructing storage facilities to  
17 reduce the frequency of the overflows or by the construction of green infrastructure to  
18 reduce the volume of these overflows, or a combination of both. The exact program will  
19 be defined in the approved LTCP update.

20 Q25. What are the "Cityshed" projects?

21 A. "Cityshed" projects are rehabilitation or relief projects in the combined sewer Citysheds  
22 located in the County and City of St. Louis required to mitigate the impacts of  
23 surcharging combined sewer systems causing health and safety issues as well as

1 extensive damage to properties and/or structures.

2 Q26. What are Asset Management Projects projects?

3 A. Asset Management projects address infrastructure renewal and capacity issues. These are  
4 the capital projects portion of an overall program that also includes significant operation  
5 and maintenance activity. A full description of this program will be testified to by  
6 Jonathon Sprague.

7 Q27. Does this conclude your prepared direct testimony in this matter?

8 A. Yes, it does.