

**COMMONWEALTH OF KENTUCKY  
PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF:**

**THE JOINT PETITION OF KENTUCKY-AMERICAN )  
WATER COMPANY, THAMES WATER AQUA )  
HOLDINGS GMBH, RWE AKTIENGESELLSCHAFT, )  
THAMES WATER AQUA US HOLDINGS, INC., )  
AND AMERICAN WATER WORKS COMPANY, )  
INC. FOR APPROVAL OF A CHANGE IN CONTROL )  
OF KENTUCKY-AMERICAN WATER COMPANY )**

**CASE NO. 2006-00197**

**RESPONSES TO ATTORNEY GENERAL'S FIRST REQUEST  
FOR INFORMATION DATED JUNE 27, 2006**

**Item No. 41**

**Attachment No. 1**

**I. AWWARF Reports w/ AWW serving as Principal Investigator:**

1. LeChevallier, M. W., M. Karim, R. Aboytes, R. Gullick, J. Weihe, B. Earnhardt, J. Mohr, J. Starceovich, J. Case, J. S. Rosen, J. Sobrinho, J. L. Clancy, R. M. McCuin, J. E. Funk, and D. J. Wood. 2003. Profiling Water Quality Parameters: From Source Water To The Household Tap. AWWA Research Foundation and American Water Works Association. Denver, CO.
2. LeChevallier, M. W. 2003. Conditions favouring coliform and HPC bacterial regrowth in drinking water and on water contact surfaces. pp. 177-197. In: J. Bartram, J. Cotruvo, M. Exner, C. Fricker, and A. Glasmacher (eds), Heterotrophic Plate Counts and Drinking-water Safety. IWA Publishing, London, UK.
3. Karim, M. R., M. W. LeChevallier, and F. W. Pontius. 2004. Workshop to Evaluate Calicivirus Detection Methods for Environmental Samples. AWWA Research Foundation and American Water Works Association. Denver, CO.
4. Kirmeyer G., K. Martel, G. Thompson, L. Radder, W. Klement, M. LeChevallier, H. Baribeau, and A. Flores. 2004. Optimizing Chloramine Treatment, Second Edition. AWWA Research Foundation and American Water Works Association. Denver, CO.
5. Means, E. G. and M. LeChevallier. 2004. Water Quality Management: How to Structure it within a Utility. Awwa Research Foundation, Denver, CO.
6. LeChevallier, M. W. and K. K. Au. 2004. Water Treatment and Pathogen Control. ISBN 92 4 156255 2, World Health Organization. Geneva, Switzerland.
7. LeChevallier, M. W. 2004. Control, Treatment and Disinfection of Mycobacterium avium Complex in Drinking Water, pp. 143-168. In: S. Pedley, J. Bartram, G. Rees, A. Dufour, J. Cotruvo (eds), Pathogenic Mycobacteria in Water. ISBN: 1843390590, World Health Organization. Geneva, Switzerland.
8. Karim, M. R., M. W. LeChevallier, M. Abbaszadegan, A. Alum, J. Sobrinho, and J. Rosen. 2004. Field Testing of USEPA Methods 1601 and 1602 for Coliphage in Groundwater. Awwa Research Foundation, Denver, CO.

9. LeChevallier, M. W. 2005. Microbial Water Quality Within the Distribution System. Pp. 83-104. In: M. J. MacPhee (ed.), Distribution System water Quality Challenges in the 21st Century: A Strategic Guide. American Water Works Association. Denver, CO.
10. Bukhari, Z., J. Weihe, and M. W. LeChevallier. 2005. Improved Detection Methods for E. coli O157:H7. Awwa Research Foundation, Denver, CO.
11. Fleming, K., J. Dugandzic, R. Gullick and M. W. LeChevallier. 2006. Susceptibility of Distribution Systems to Negative Pressure Transients. Awwa Research Foundation, Denver, CO.

## II. AWWARF Reports w/ AWW Participating but not serving as Principal Investigator:

1. Pope, M. L., B. Ellis, J. S. Rosen, K. Connell, J. Pulz, M. LeChevallier, C. Rodgers, S. Regli, and D. Schmelling. 2003. Using E. coli to Indicate Source Water Susceptibility to High Concentrations of Cryptosporidium. Pp. 397-436. In: M. J. McGuire, J. L. McLain, and A. Obolensky (eds.), Information Collection Rule Data Analysis, AWWA Research Foundation and American Water Works Association, Denver, CO.
2. Kirmeyer G., K. Martel, G. Thompson, L. Radder, W. Klement, M. LeChevallier, H. Baribeau, and A. Flores. 2004. Optimizing Chloramine Treatment, Second Edition. AWWA Research Foundation and American Water Works Association. Denver, CO.
3. Freidman, M. L. Radder, S. Harrison, D. Howie, M. Britton, G. Boyd, H. Wang, R. Gullick, M. LeChevallier, D. Wood, and J. Funk. 2004. Verification and Control of pressure Transients and Intrusion in Distribution Systems. Awwa Research Foundation, Denver, CO.
4. Powell, J., J. Clement, M. Brandt, R. Casey, D. Holt, W. Grayman, and M. LeChevallier. 2004. Predictive Models for Water Quality in Distribution Systems. Awwa Research Foundation, Denver, CO.
5. Cotton, C., L. Passantino, D. Owen, M. Bishop, M. Valade, W. Becker, R. Joshi, J. Young, M. LeChevallier, and R. Hubel. 2005. Integrating UV Disinfection into Existing Water Treatment Plants. Awwa Research Foundation, Denver, CO.

## III. Summary of Journal Publications 2003 to 2005

1. LeChevallier, M. W., G. D. Di Giovanni, J. L. Clancy, Z. Bukhari, S. Bukhari, J. S. Rosen, J. Sobrinho, and M. M. Frey. 2003. Comparison of Method 1623 and cell culture-PCR for detection of Cryptosporidium spp. in source waters. Appl. Environ. Microbiol. 69(2): 971-979.
2. MacPhee, M. J., D. A. Cornwell, N. e. McTigue, D. K. Hardy, and M. LeChevallier. 2003. Treating recycle streams to remove contaminants. Opflow. 29(3): 12-15.
3. LeChevallier, M. W., R. W. Gullick, M. R. Karim, M. Friedman, and J. E. Funk. 2003. The potential for health risks from intrusion of contaminants into distribution systems from pressure transients. J. Water and Health 1(1): 3-14.

4. Bukhari, Z. and M. LeChevallier. 2003. Assessing UV reactor performance for treatment of finished water. *Water Sci Technol.* 47(3): 179-84.
5. Karim, M, M. Abbaszadegan, and M.W. LeChevallier. 2003. Potential for pathogen intrusion during pressure transients. *JAWWA* 95(5): 134-146.
6. Abbaszadegan, M, M. LeChevallier, and C. Gerba. 2003. Occurrence of Viruses in US Groundwaters. *JAWWA* 95(9): 107-120.
7. Weiss, W. J., E. J. Bouwer, W. P. Ball, C. R. O'Melia, M. W. LeChevallier, H. Arora, and T. F. Speth. 2003. Riverbank Filtration – fate of DBP precursors and selected microorganisms. *JAWWA* 95(10): 68-81.
8. Bukhari, Z., F. Abrams and M. LeChevallier. 2004. Using ultraviolet light for disinfection of finished water. *Water Sci Technol.* 50(1): 173–178.
9. Bukhari, Z., J. Weihe and M. LeChevallier. 2004. Development of procedures for rapid detection of *E. coli* O157:H7 from source and finished water samples. *Water Sci Technol.* 50(1): 233–237.
10. Karim, M. R., F. W. Pontius, and M. W. LeChevallier. 2004. Detection of Noroviruses in Water-Summary of an International Workshop. *J. Infect. Dis.* 189: 21-28.
11. Haddix, P. L., N. J. Shaw, and M. W. LeChevallier. 2004. Characterization of Bioluminescent Derivatives of Assimilable Organic Carbon Test Bacteria. *Appl. Environ. Microbiol.* 70(2): 850-854.
12. Wade, T. J., S. K. Sandhu, D. Levy, S. Lee, M. W. LeChevallier, L. Katz, and J. M. Colford, Jr. 2004. Did a Severe Flood in the Midwest Cause an Increase in the Incidence of Gastrointestinal Symptoms? *Amer. J. Epidemiol.* 159(4): 398-405.
13. Norton, C. D., M. W. LeChevallier, and J. O. Falkinham, III. 2004. Survival of *Mycobacterium avium* in a Model Distribution System. *Water Research*, 38: 1457-1466.
14. LeChevallier, M.W. and R.E. Hubel. 2004. Cryptosporidium Risk Analysis and UV Disinfection System Reliability. *IUVA News* 6(2): 9-14.
15. Bukhari, Z. and M. LeChevallier. 2004. Finished water disinfection with UV light: Overview of validation studies at American Water. *IUVA News* 6(2): 15-20.
16. Aboytes, R., G.D. Di Giovanni, F. A. Abrams, C. Rheinecker, W. McElroy, N. Shaw, and M. W. LeChevallier. 2004. Detection of Infectious Cryptosporidium in filtered drinking water. *JAWWA* 96(9): 88-98.
17. Gullick, R.W., M.W. LeChevallier, R.C. Svindland, and M.F. Friedman. 2004. Occurrence of low and negative pressures in distribution systems. *JAWWA* 96(11): 52-66.
18. Karim, M. R., and M. LeChevallier. 2004. Detection of Noroviruses in Water: Current Status and Future Directions. *Journal of Water Supply: Research and Technology-AQUA.* 53(6):359-380.
19. DiGiovanni, G. D. and M. W. LeChevallier. 2005. Quantitative-PCR Assessment of *Cryptosporidium parvum* Cell Culture Infection. *Appl. Environ. Microbiol.* 71(3):1495–1500.
20. Gullick, R.W., M.W. LeChevallier, J. Case, D.J. Wood, J.E. Funk, and M.J. Friedman. 2005. Application of pressure monitoring and modeling to detect and minimize low pressure events in distribution systems. *J. Water Supply & Technol. – AQUA* 54(2): 65-81.

21. Weiss, W.J., E.J. Bouwer, R. Aboytes, M.W. LeChevallier, C.R. O'Melia, B.T. Le, and K.J. Schwab. 2005. Riverbank filtration for control of microorganisms: Results from field monitoring. *Water Res.* 39(10): 1990–2001
22. Volk, C., L.A. Kaplan, J. Robinson, B. Johnson, L. Wood, H.W. Zhu, and M. LeChevallier. 2005. Fluctuations of dissolved organic matter in river used for drinking water and its impact on conventional treatment plant performance. *Environ. Sci. & Technol.* 39 (11): 4258-4264.

IV. Books/Book Sections:

1. LeChevallier, M. W. 2003. Conditions favoring coliform and HPC bacterial regrowth in drinking water and on water contact surfaces. pp. 177-197. In: J. Bartram, J. Cotruvo, M. Exner, C. Fricker, and A. Glasmacher (eds.), *Heterotrophic Plate Counts and Drinking-water Safety*. IWA Publishing, London, UK.
2. LeChevallier, M. W. and K. K. Au. 2004. *Water Treatment and Pathogen Control*. ISBN 92 4 156255 2, World Health Organization. Geneva, Switzerland.
3. LeChevallier, M. W. 2004. Control, Treatment and Disinfection of *Mycobacterium avium* Complex in Drinking Water, pp. 143-168. In: S. Pedley, J. Bartram, G. Rees, A. Dufour, J. Cotruvo (eds.), *Pathogenic Mycobacteria in Water*. ISBN: 1843390590, World Health Organization. Geneva, Switzerland.