Because water quality tests were not performed and disinfection residual levels were not monitored and maintained at point-of-use storage containers during the period surveyed, the potential for water quality degradation existed and the risk of contamination was present. However, auditors found no supporting records to confirm or deny that actual contamination occurred. The survey results are the perceptions of the water users who attributed their concerns to water quality, but they do not document actual water quality test results.

Treatment and Oversight at Camp Q-West. On February 1, 2006, military preventive medicine personnel discovered that KBR was using chlorinated wastewater from its ROWPU to fill personal hygiene facilities at Camp Q-West. KBR distributed the chlorinated wastewater from March 14, 2004, through February 3, 2006, to a camp population of approximately 5,000 personnel. KBR did not monitor or record the quality of water at point-of-use containers before April 2006, even though the LOGCAP contract required the company to do so. KBR inappropriately distributed the ROWPU wastewater[15] directly into shower and latrine point-of-use containers without informing military preventive medicine oversight officials. KBR officials stated that they did this because of frequent source water shortages at Camp Q-West.[16] KBR also misapplied TB MED 577 governing the selection of water sources and the management of production wastewater. The wastewater is a concentrated byproduct of the water purification process and its composition is different from that of the original source water. The contaminants present in the wastewater include most of the contaminants that are in the source water, but they are at different concentrations. The suspended solids concentration is less than that of the raw water because the ROWPU pretreatment filtration system removes them. However, the dissolved solids, alkalinity, metals, and chloride concentrations are as much as two times their respective concentrations than in the source water, since pre-reverse-osmosis filtration does not remove them and the ROWPUs membranes reject them.[17] This "new source" water should have undergone an analysis by medical personnel before its use. TB MED 577 required wastewater to be disposed of 25 yards downstream of the raw water intake and gave no option for its reuse.[18] KBR did not inform preventive medicine personnel before using the wastewater. As a result, preventive medicine could not inspect or test the water for suitability and verify that it would not impair the health of U.S. forces. To complicate matters, before January 20, 2006, preventive medicine personnel did not perform the required periodic[19] water quality monitoring at point-of-use storage. Preventive medicine management officials gave several reasons for not performing the oversight: a shortage of personnel caused by sending staff to another unit that did not have its own preventive medicine support; a lack of transportation; the number of camps within the unit's area of responsibility; and competing medical priorities. Oversight officials

[15] ROWPU wastewater was also referred to as brine or concentrate.
[16] According to the Camp Q-West personnel, the water source for the camp is provided through a 21-mile pipeline network from the Tigris River. The pipeline is susceptible to power equipment failures, unauthorized access taps, sabotage, breaks, and frequent leaks. The pumping station, electrical pumps, and pipeline are 30 years old and frequently fail often leaving the camp with limited or no water.
[17] TB MED 577, December 2005, Chapter 11, paragraph 11-2 c.
[18] TB MED 577, March 1986, Chapter 5, paragraph 5-5 b.
[19] TB MED 577, March 1986, Chapter 8, paragraph 8-6 a. and 8-7.