

**From:** CPT Callahan, A. Michelle  
**Sent:** Friday, March 31, 2006 6:49 AM  
**To:** Higgins, Neal (DPC)  
**Subject:** Q-West water contamination

Sir,

I am the 101<sup>st</sup> Sustainment Brigade Surgeon (a family physician), currently serving in Iraq. My mother contacted your office previously and she forwarded me your request for more information about our water contamination. I have read information on the internet about the situation you are investigating in Ar Ramadi. The situation here was almost identical. I am glad to know your office is looking into this. I find it concerning that even after KBR had gone through the investigation at Ar Ramadi they still provided doubly contaminated water to soldiers at our FOB (Q-West). But I will try to stay away from opinions and give you an objective description of our situation.

In January I noticed the water in our Showering facility was cloudy and had a foul odor. At the same time (over a 2 week period) I had a sudden increase in soldiers with bacterial infections presenting to me for treatment. All of these soldiers live in the same living area (PAD 103) and use the same water to shower. I had 4 cases of skin abscesses, 1 case of cellulitis, and one case of bacterial conjunctivitis. On January 20<sup>th</sup> I asked our preventive medicine environmental science officer (1LT Simon Strating) to test the water at PAD 103. I also asked the FOB Medical Clinic physician if he had seen an increase in bacterial infections. He stated he had not. At this point I thought it was a problem just with the water storage tank at PAD 103. PM tests results of the PAD 103 water showed no chlorine residual and was positive for coliform bacteria. Still thinking this was a problem isolated to PAD 103, we had KBR clean and super chlorinate the storage tank. After this was completed the tank water was retested. Chlorine levels were adequate and there was no bacterial growth. The water was still cloudy.

Although we had treated the problem, we still did not have a satisfactory answer as to why the water was contaminated. During a discussion (on 1 Feb 2006) between LT Strating and a newly hired KBR water quality technician (Mr. Bill Gist) LT Strating mentioned the bacterial infections that I had been seeing in my clinic. Mr. Gist told LT Strating he had concerns that the ROWPU concentrate reject was being used to fill the water tanks at the PADs. After hearing this LT Strating investigated. He went to the water treatment site and followed the lines from the ROWPU concentrate drain to water trucks filling up with this water. He then followed this truck and observed it pumping the water into the water storage tank at PAD 206. The PM team tested the water at the ROWPU concentrate distribution point. The results are as follows: FAC 0.01% mg/L, pH 6.5, Coliform Positive, E. coli Positive, Turbidity 129NTU (if you want the complete list of results please let me know). After discovering that KBR was filling the water storage tanks with ROWPU concentrate, LT Strating gathered the base mayor (COL Grayson), The Q-West KBR site manager (Bernardo Torres), Rachel Vanhorn (KRB LNO), Mathew Wallace (KBR ROWPU Manager) and Bill Gist (water quality technician) to the ROWPU site and told them all at the same time that he had identified that KBR was filling the water storage tanks with ROWPU concentrate. Mr. Wallace stated that it has always been done this way and there is not a problem with it. LT Strating explained that it is against Army regulations (TB MED 577) to use ROWPU reject for personal hygiene. Mr. Wallace argued that since the raw water from the Tigris is first filtered through carbon prior to going into the ROWPU that it is acceptable for hygiene. This argument is wrong. Charcoal filtration only removes particulate mater and binds some chemicals. All the bacteria and chemicals that make it though the charcoal are concentrated to twice the level as in the Raw water. This is the water with which the soldiers at Q-West have been showering, shaving, and brushing their teeth.

After this was reported to higher, KBR sent a team of water experts to Q-west. I am not sure what all they did while they were here. The Army sent Mr. Eric Bell, from the DCMA office to investigate. I do not know details of his findings. What I do know is that KBR stopped this practice. They could not produce enough clean water for our shower units with the ROWPU units they had on had. They brought in a 3<sup>rd</sup> unit and now comply with the contract they have with us. The contract requires that they conform to the standards as per TB MED 577.

This is as detailed an account I can give. I am sure if your office investigates, they will be able to get further information.

I hope this helps. Please let me know if you have additional questions.

Respectfully,

A. Michelle Callahan, MD  
CPT, MC  
Brigade Surgeon  
101<sup>st</sup> Sustainment Brigade