

Marlo Berg

From: Marlo Berg
Sent: Monday, July 29, 2013 10:58 AM
To: Russell Schreiber (russell.schreiber@wichitafallstx.gov); Daniel Nix (daniel.nix@wichitafallstx.gov); Kerry D. Maroney (kdm@bmiwf.com)
Cc: Vera Poe; Joel Klumpp; Ada Lichaa; Jack Schulze; Pritesh Tripathi; James Weddell; Linda Brookins
Subject: RE: Response to City of WF - Please review

Dear Daniel,

We had said we would get back to you on two issues from our meeting on Thursday. See our responses below.

1. Q. Does the full scale verification test need to be shut down if there are elevated levels of crypto or giardia entering the facility?
 - A. No, Item No. 8 of the TCEQ's 4th Set of Questions applies to the content of the Operations & Maintenance Manual and Monitoring Plan for a TCEQ approved Direct Potable Reuse (DPR) Water Treatment Plant (WTP) discharging water to the City's distribution system for human consumption. At that time, the Full-Scale Verification Test will need to be shut down and restarted when parameters show that the plant is not performing properly. For example, if the EP nitrates levels are over the MCL or the filters failure to meet specified turbidity. Because the facility is not going to distribute the water during the Full-Scale Verification Test, higher levels of pathogens can be used to determine the efficiency of removals the facility can provide.
2. We also said we would provide a rewrite to the 4th questions number 8kii. See below
 - ii. The *Giardia* and *Cryptosporidium* levels in water from the DPR WTP at the entry point (EP) to the distribution for human consumption must remain at zero cysts/L and oocysts/L respectively as indicated by analyses performed by either off-site or on-site methods. 15 liters (L) of water from the DPR facility should be collected to be analyzed using Method 1623. The volume of water and levels for the on-site method will be determined after analysis of the data provided during the full scale verification test.

*During the verification testing and during the full scale operation, if *Giardia* or *Cryptosporidium* are detected in the EP sample results, the TCEQ will require the DPR WTP-to be shut down, inspected and, if necessary, repaired. The City must resample and received a non-detect on the repeat samples.*

*Please note that the TCEQ's minimum required 7.0-log combined inactivation and removal for *Giardia* and 5.5-log removal for *Cryptosporidium* are only protective of public health if the DPR WTP's water at the EP does not contain:*

1. *A *Giardia* concentration greater than 7.000×10^{-6} cysts/L; or*
2. *A *Cryptosporidium* concentration greater than 2.999×10^{-5} oocysts/L.*

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