

Subject: FW: Wichita Falls Concept Paper Correction

Date: Monday, November 26, 2012 at 10:30:54 AM Central Standard Time

From: Joel Klumpp

To: Vera Poe, Ada Lichaa, Deborah Helstrom, James Weddell, Jack Schulze, Marlo Berg, Alicia Diehl

FYI-

From: Daniel Nix [mailto:daniel.nix@wichitafallstx.gov]

Sent: Monday, November 26, 2012 9:49 AM

To: Joel Klumpp

Cc: Russell Schreiber; Kerry D. Maroney; Harold Burris

Subject: Concept Paper Correction

Joel,

After our discussion last week, I went back and looked at the historical data for Nitrate in the wastewater effluent. It was averaging around 16 ppm, which is significantly below the average of 80 ppm that is cited in the Concept Paper.

So, I looked at the recent data for Nitrate that I was using for the Concept Paper and found that the spreadsheet that we were using to keep track of all the data was not converting the Nitrate from Nitrate as Nitrate (NO₃ as NO₃) to Nitrate as Nitrogen (NO₃ as N).

Long story short, the conversion dramatically changes the Nitrate values for the Concept Paper.

Please use the attached changes for your evaluation of the City's Concept Paper, and I apologize for the confusion.

Nitrate paragraph in Concept Paper

If the average amount of Nitrate that can be expected is 18 ppm (Nitrate as N), and an average reduction of 80% through the RO process, that would yield a Nitrate concentration of 3.6 ppm (Nitrate as N) in the RO Permeate. If the RO permeate is blended with the existing Source water at a 1:1 ratio, then it can be expected that the 3.6 ppm will be further reduced to 1.8 ppm (Nitrate as N), which is below the regulatory MCL of 10.0 ppm.

Appendix A

Nitrate (Nitrate as N) Avg = 17.52 ppm

Reply E-mail dated Nov 14, 2012

Right now, the lab spreadsheet is showing 5 Nitrate samples:

Nitrate (as N) = 15.17 (9/5/12)

Nitrate (as N) = 19.13 (9/11/12)

Nitrate (as N) = 18.27 (9/18/12)

Nitrate (as N) = 17.39 (9/27/12)

Nitrate (as N) = 17.65 (10/2/12)