

Prysby, Mike (DEQ)

From: Busch, Stephen (DEQ)
Sent: Monday, July 08, 2013 11:20 AM
To: Wurfel, Brad (DEQ); Copen, Leigh (DEQ); Shekter Smith, Liane (DEQ); Bloemker, Jon (DEQ); Willard, Veronica (DEQ)
Cc: Prysby, Mike (DEQ); Benzie, Richard (DEQ)
Subject: Media Inquiry - Flint WTP Engineering

I received a call this morning (July 8) from Dominic Adams, Flint Journal/Mlive. I called him back with Mike Prysby, District Engineer sitting in on the call.

Mr. Adams had obtained information that the City of Flint was contracting some engineering work for the Flint WTP, and the work was in part to potentially use the Flint River as a primary drinking water source.

I informed Mr. Adams that the City of Flint receives treated water from DWSD and has been since the 1960's, but has had the WTP available for reliability should the single transmission line system from DWSD fail. In an emergency the Flint WTP is already approved to use the Flint River for source water and is designed to meet all drinking water standards and public health requirements.

I also informed Mr. Adams that the engineering work in question would be to primarily enhance treatment capabilities beyond minimum requirements for the purpose of softening to provide customers with water quality consistent with what they already receive from DWSD. Some equipment for softening is already in place, but under emergency operation would not normally be used due to the time required for startup and fine tuning.

Mr. Adams asked whether the DEQ has approved or signed off on the proposed engineering work and on allowing the City of Flint to use the River as its source water. I explained that the ODWMA has not received a construction permit application for such work at this time, and that one would be required. I also indicated to Mr. Adams, that regardless of the source water, the City of Flint would be required to meet all applicable Drinking Water Standards and public health requirements and again that the WTP is already approved as a redundant supply to use the Flint River as a source water meeting all drinking water standards and that the WTP undergoes test runs on a quarterly basis to maintain the WTP.

Mr. Adams asked for more specifics regarding the treatment process and I explained that the removal of hardness for aesthetic water quality at this WTP is called lime softening.

Mr. Adams also inquired about the City being able to use the Flint River after the contract with DWSD terminates, and I indicated that may be one option, but they could also continue to purchase treated water from DWSD.

In Mr. Adams voicemail he mentioned a variance to use the Flint River, and I reiterated that there is no "Variance", but that the WTP has been constructed and approved to treat water from the Flint River to appropriate standards as needed.

Let me know if you have any questions.

Stephen Busch, P.E.
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- The fluoride concentration in Flint's finished water must remain comparable to the fluoride concentration in DWSD's water.
- Suggested Practices recommends, and we fully endorse, monitoring WTP filters and plant tap for total coliform bacteria on a daily basis. In addition to plant tap monitoring, a protocol should be established for monitoring both treated water components prior to blending.
- Finished water must meet all other applicable Maximum Contaminant Levels for organic and inorganic parameters.

Based upon the 2007 Water Treatment Plant Sanitary Survey and the results of the most recent WTP test runs, we are confident that the WTP can meet the operational parameters discussed above. Given the installation of intermediate chlorination and improved ozone residuals, Flint's CT calculation will need to be updated.

Since Flint was not required to conduct the initial round of source water monitoring for cryptosporidium, treatment classification as part of the Long Term 2 Enhanced Surface Water Treatment Rule requirements has not been determined for the WTP. The next round of cryptosporidium monitoring begins in 2015 and subsequent bin treatment classification for Flint will be determined by 2017 (after completing 24 months of monitoring). Additional treatment for cryptosporidium may be required depending on the monitoring results.

Also, since DWSD would no longer be Flint's sole source of water, various water distribution system programs including Flint's Bacteriological Monitoring, Lead and Copper, and the Stage 2 Disinfectants and Disinfection Byproducts monitoring programs will change. Specific changes to these monitoring programs will be discussed in more detail after the city identifies the future operation of the Flint WTP.

The DEQ has no objection to blending Flint River water with water purchased either from DWSD or the KWA. This type of operation will place Flint's WTP into service on a full-time basis and be of benefit in several ways. Fulltime operation will help to ensure proper function and optimization of treatment while allowing WTP operators to accrue additional experience at operating and monitoring all unit processes. Fulltime operation also helps to keep treatment equipment and their components in a reliable state of operation.

Finally, a question was raised as to the extent that the city of Flint will be required to provide a full-time back-up water supply to the city and Genesee County. As we discussed, the average day demand (with restrictions on nonessential water use) for the combined needs of Flint and Genesee County will need to be met. Both capacity and hydraulics (transmission capabilities to Genesee County) need to be determined, as part of a basis of design towards proposing a full back-up water supply for both Flint and Genesee County.