

Met with the Mayor today and he seems to be under the impression that the City Administrator is on this task force as well. I told him I would check but this was intended to make sure that the state and EPA are taking consistent technical positions. Let me know if I'm wrong about that.

From: Kaplan, Robert [<mailto:kaplan.robert@epa.gov>]
Sent: Friday, October 23, 2015 10:37 AM
To: Sygo, Jim (DEQ)
Subject: RE: Flint WTP PH2 SEG4 - Corrosion Control

Jim,

Thanks for the note. There does appear to be agreement. I will confirm that with the Task Force team members today just to make certain we haven't missed anything.

This is good news. I'm glad we're moving quickly, and working together. The Task Force will discuss the "test loops" and make sure we have agreement on the protocol.

I'm setting up a call for next week to discuss this weekend's school sampling effort.

- Bob

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From: Sygo, Jim (DEQ) [<mailto:SygoJ@michigan.gov>]
Sent: Thursday, October 22, 2015 4:39 PM
To: Kaplan, Robert <kaplan.robert@epa.gov>
Subject: FW: Flint WTP PH2 SEG4 - Corrosion Control

Bob,

There appears to be agreement on the optimization of corrosion control for the City of Flint. This is the note provided to me by staff after a discussion with members of your task force.

From: Busch, Stephen (DEQ)
Sent: Thursday, October 22, 2015 12:58 PM
To: Schock, Michael; Lytle, Darren
Cc: Kempic, Jeffrey; Prysby, Mike (DEQ); kaplan.robert@epa.gov; Krisztian, George (DEQ); Sygo, Jim (DEQ)
Subject: RE: Flint WTP PH2 SEG4 - Corrosion Control

This will summarize our phone conversation of 10/19 and provide clarification regarding the previous comments.

The City of Flint converted back to purchasing of Detroit Water and Sewerage Department water on Friday October 16, 2015. No indications of upset in the distribution system have been reported to date.

Detroit Water and Sewerage Department (DWSD) has confirmed the use of Innophos "Phosphoric Acid 75% Technical" product which is NSF Standard 60 certified with a maximum allowable feed rate of 13 mg/L as product.

The City of Flint will need to supply a similar phosphoric acid product, NSF Standard 60 approved with allowable maximum dosage.

DWSD supplied water is currently dosed at 0.39 mg/L as P (1.2 mg/L as PO₄) slightly above DWSD's OCCT requirement to dose a minimum of 0.9 mg/L as PO₄ and have a minimum plant tap residual of 0.8 mg/L as PO₄. DWSD plant tap residuals have been shown to consistently be at 0.39 mg/L as P (1.2 mg/L as PO₄). In addition water supply entering Flint has been tested and so far shown to contain approximately 0.39 mg/L as P (1.2 mg/L as PO₄) as well.

To achieve pipe passivation Flint will boost orthophosphate dosage to establish a minimum distribution residual of 1.0 mg/L as P (3.1 mg/L as PO₄). The chemical feed system will be sized to achieve a dose up to 2.0 mg/L as P (6.1 mg/L as PO₄) in case orthophosphate loss is observed.

Flint will continue Water Quality Parameter Monitoring in accordance with the LCR at the same 25 distribution locations used under the Flint River. In addition 10 of these locations also serve as total coliform monitoring sites, including disinfectant residual, and Flint will be told to, for the purpose of assessing water stability, conduct water quality parameter monitoring along with turbidity and iron sampling will be at these 10 locations on a weekly basis as suggested. This will also ensure that a minimum recommended pH levels are being maintained throughout the system.

EPA ORD staff will provide instructions to the City of Flint for creating test loops to help confirm effectiveness of the corrosion control treatment. This data will help in rebuilding public trust.

The County Health Department and MI Department of Health and Human Services will be conducting blood lead level testing of children in Flint. Children with elevated blood lead levels will be offered exposure assessments of their homes. These assessments should include the contribution of lead from service line and interior plumbing sources. Such diagnostic testing should help further substantiate the effectiveness of corrosion control treatment. Procedures recommended by EPA should be shared with the Michigan Department of Health and Human Services.

The University of Michigan in Ann Arbor had previously expressed interest in assisting the City of Flint. Both the Department of Civil and Environmental Engineering, and School of Public Health should be contacted to determine if that interest still exists with potential to assist in both test loop construction and monitoring, and exposure assessment monitoring in homes. Any water analysis should occur at a certified laboratory.

The City will be required to complete a 6 month round of lead and copper compliance monitoring in the January – June 2016 period. The City continues to offer all residents a first draw lead sample collection and analysis. Any additional staggered monitoring suggestions should be brought before the City's Technical Advisory Committee.

Criteria for deeming the treatment optimized must be established as the LCR only requires compliance with the lead and copper Action Levels once this determination has been made.

The City of Flint is continuing to digitize service line index card records into a Geographic Information System to confirm the location of lead service lines. EPA can provide additional information to the City regarding a sampling procedure to verify lead service line sites.