

**Summary of City of Flint (City) Actions
In Response to the
EPA Emergency Administrative Order
Updated: April 15, 2016**

Chapters 52, 57, 59a & 59b: Weekly Conference Call Regarding Flint Water Plant Operations April 15, 2016.

EPA Order Due Date: Weekly

MDEQ and the Flint Water Treatment Plant staff held the weekly conference call to review and discuss the weekly summary of water quality and corrosion control parameters that are reported on both the city's April operation report completed to date, and a summary of water quality parameters collected in the distribution system during the week of April 10th. These reports are being used to monitor the city's corrosion control treatment.

The following observations were noted:

- The supplemental phosphate dosage was consistent and ranged between 2.65 and 2.70 milligrams per liter.
- All of the phosphate residuals in the distribution system at the sites monitored weekly were at or above the minimum of 3.1 milligrams per liter to be maintained at all distribution monitoring locations, ranging between 3.27 and 3.65 milligrams per liter.
- All pH measurements were greater than 7.0 at the Enhanced Water Quality Monitoring (EWQM) sites and the Point of Entry to the system. The pH levels ranged from 7.25 to 7.30 in the water received from Great Lakes Water Authority and from 7.14 to 7.29 at the distribution system sites.
- Iron levels ranged between 0.01 and 0.07 milligrams per liter at all EWQM sites. Plant tap iron concentrations ranged from 0.00 to 0.02 in the last week.
- All but one of the lead samples collected from the EWQM sites this week reported no lead detected, with one site reporting 2 micrograms per liter. This site also reported the lowest phosphate residual (3.15 mg/l) and the highest iron concentration (0.04 mg/l). The city will investigate further and advise this facility to flush their premise plumbing routinely to provide exposure to the increased corrosion control treatment now being provided.
- The temperature variations at the EWQM sites were noted. The city still plans to investigate possible reasons for these variations.
- The city is conducting additional exploratory monitoring of distribution sites for EWQM. Additional sampling is being performed to determine if the city should expand or alter the current sites. Before any formal changes are made in the existing EWQM plan, the city has agreed to contact us if these exploratory sites indicate a problem with phosphate residuals or pH.

- An auto-flusher installed by EPA at a distribution location near EWQM Site #1 has resulted in noticeable water quality improvements. The Flint WTP staff indicated they have been having discussions with EPA about locating the additional auto-flushing equipment, and they plan to target areas identified by EPA as having unexpectedly low chlorine residuals – where water age should not be a problem but chlorine residuals show otherwise.
- The city has drafted Standard Operating Procedures for operation of their Phosphate feed system and for phosphate dosage calculations that include a description of the process for hourly feed rate verification. They are also plotting a table of pump capacities based on pump settings that operators may use when feed rate adjustments are needed. When these SOPs are final, they will be submitted for review.

Overall, the corrosion control treatment is meeting expectations as demonstrated from the water quality monitoring submitted this week.