

**Summary of City of Flint (City) Actions
In Response to the
EPA Emergency Administrative Order
Updated: December 21, 2017**

Chapters 52, 57, 59a & 59b: Weekly Report Regarding Flint Water Plant Operations
December 21, 2017.

EPA Order Due Date: Weekly

The Michigan Department of Environmental Quality (MDEQ) held a conference call with Flint Water Treatment Plant Staff on December 21, 2017, to review and discuss the summary of water quality and corrosion control parameters reported on the City's December operation report completed to date, and a summary of water quality parameters collected for the seven-day period from Thursday, December 14, 2017, to Wednesday, December 20, 2017, from the ten sites monitored weekly. Data review (from the MOR) and enhanced weekly distribution system data is summarized below. Please note: SITENAME is being used for water quality data instead of West Side until the reservoir is placed back into service. The City contractor completed an inspection of the West Side reservoir May 22, 2017, to May 25, 2017. The Inspection report dated June 6, 2017, is being reviewed by the City.

The following observations were noted:

- The supplemental phosphate dosage ranged between 2.49 and 2.77 milligrams per liter. The phosphate residuals measured at the plant tap ranged from 3.6 to 3.9 milligrams per liter entering the distribution system.
- All pH measurements were greater than 7.0 at all ten of the Enhanced Water Quality Monitoring (EWQM) sites and the Point of Entry (Plant tap) to the system. The pH levels ranged from 7.15 to 7.53 in the water received from Great Lakes Water Authority (GLWA); from 7.48 to 7.78 at Plant tap; and from 7.52 to 7.86 at the ten distribution system sites.
- The City's Sodium Hydroxide feed for pH control ranged from 4.8 to 5.6 milligrams per liter at Control Station #2.
- The phosphate residual at the ten established, weekly distribution system sites ranged between 3.34 and 3.64 milligrams per liter.
- Iron levels at EWQM sites ranged from 0.00 to 0.05 milligrams per liter. Plant tap iron concentrations measured from 0.00 to 0.02 milligrams per liter in the last week.
- The supplemental chlorine feed at Control Station #2 ranged from 1.21 to 1.41 milligrams per liter and the plant tap free chlorine residuals ranged from 1.6 to 1.8 milligrams per liter.
- The free chlorine residuals at the City's 25 monitoring sites in the distribution system ranged from 0.93 to 1.70 milligrams per liter.