

**Summary of City of Flint Actions  
In Response to the  
United States Environmental Protection Agency  
Emergency Administrative Order  
Updated: December 8, 2018**

Chapters 52, 57, 59a & 59b: Weekly Report Regarding Flint Water Plant Operations  
December 8, 2018.

United States Environmental Protection Agency Order Due Date: Weekly

The Michigan Department of Environmental Quality contacted Flint Water Treatment Plant Staff on December 8, 2018, to review and discuss the summary of water quality and corrosion control parameters reported on the city of Flint's (City) November and December operation reports completed to date, and a summary of water quality parameters collected for the seven-day period from Thursday, November 29, 2018, to Wednesday, December 5, 2018, from the ten sites monitored weekly. Data review (from the MOR) and enhanced weekly distribution system data is summarized below.

The following observations were noted:

- The supplemental phosphate dosage ranged between 2.24 and 2.32 milligrams per liter. The phosphate residuals measured at the plant tap ranged from 3.5 to 3.7 milligrams per liter entering the distribution system.
- All pH measurements were greater than 7.2 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 7.32 to 7.49 in the water received from Great Lakes Water Authority (GLWA); from 7.38 to 7.57 at Plant tap; and from 7.26 to 7.86 at the ten distribution system sites.
- The City's Sodium Hydroxide feed for pH control ranged from 2.5 to 2.8 milligrams per liter at Control Station #2.
- The phosphate residual at the ten established, weekly distribution system sites ranged between 3.15 and 3.52 milligrams per liter.
- Iron levels at EWQM sites ranged from 0.00 to 0.09 milligrams per liter. Plant tap iron concentrations measured ranged from 0.01 to 0.06 milligrams per liter in the last week.
- The supplemental chlorine feed at Control Station #2 ranged from 0.82 to 1.14 milligrams per liter and the plant tap free chlorine residuals ranged from 1.5 to 1.7 milligrams per liter.
- The free chlorine residuals at the City's 30 monitoring sites in the distribution system ranged from 0.26 to 1.77 milligrams per liter. The low residual occurred at MLK BLVD and the high residual was at Cedar Street.