



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
SAGINAW BAY DISTRICT OFFICE



C. HEIDI GREYER  
DIRECTOR

December 13, 2017

Mr. Robert Bincsik, Director  
City of Flint Department of Public Works  
3310 East Court Street  
Flint, Michigan 48506

Dear Mr. Bincsik:

SUBJECT: Interim Water Quality Parameters, WSSN: 02310

This letter provides revised information regarding the collection and reporting of water quality parameter (WQP) samples on an interim basis from the city of Flint's supplemental water treatment facility and distribution system. The adjustments to the city's supplemental chemical feed systems are based on the corrosion control study released by Cornwell Engineering Group. The proposed WQP program is intended to assist our joint effort to establish final WQPs and provide transparent evidence of the water quality provided to city residents.

WQP samples are required under the Lead and Copper Rule (LCR); therefore, these samples will be used to determine compliance. The required monitoring may be periodically modified based on the results produced by the program. Also, the WQP sampling program may be changed after the final corrosion control study report is released in 2018 or 2019; however, you must continue to monitor according to the schedule already in effect until you are otherwise notified by the DEQ.

This revised WQP sampling program leaves the current weekly Enhanced Water Quality Monitoring (EWDM) program in place. The location, parameters and frequency for the monitoring will remain the same. However, there are minor adjustments to the required distribution system phosphate and pH ranges as shown below:

| Parameter-EWDM Sampling Stations | Target* | 100 percent range** |
|----------------------------------|---------|---------------------|
| pH (standard units)              | 7.5     | 7.2 – 7.9           |
| Orthophosphate residual (mg/l)   | 3.3     | 3.1 – 4.5           |

\* The target value is an operational goal only for your water system. Failure to meet the target value will not result in violations. \*\* The 100 percent range is a required operating range for your water system. One hundred percent of your monthly sample results must fall within the 100 percent range for each parameter, except that nine (9) excursion days are allowed during each six (6) month WQP monitoring period. An excursion day is a day during which one or more result is outside the allowable range.

The major program change is the setting of WQPs at the point of entry for the city's supplemental water treatment facility. The values established for the water treatment facility are based on the pH, orthophosphate, and chlorine residual values needed over the past 1½ years to meet distribution system water quality goals. The intent is to set well-defined treatment

to meet distribution system water quality goals. The intent is to set well-defined treatment facility goals or targets for the city's operational staff to more consistently meet the distribution system WQP values. The following WQP targets and ranges are established for the point of entry to the distribution system (water plant tap):

| Parameter-Water Treatment Facility | Target*   | 90 percent range* | 100 percent range** |
|------------------------------------|-----------|-------------------|---------------------|
| pH (standard units)                | 7.5       | 7.3 – 7.8         | 7.2 – 7.9           |
| Orthophosphate residual (mg/l)     | 3.6       | 3.3 – 4.0         | 3.2 – 4.5           |
| Free chlorine residual (mg/l)      | 1.5 – 1.8 | 1.4 – 1.9         | 1.3 – 2.0           |

\* The target and 90 percent range values are operational goals only for your treatment system. At least 90 percent of your daily values for each month should fall within the 90 percent range for each parameter. Failure to meet the target and 90 percent range goals will not result in violations. \*\* The 100 percent range is a required operating range for your treatment system. One hundred percent of your daily values must fall within the 100 percent range for each parameter, except that nine (9) excursion days are allowed during each six (6) month WQP monitoring period. An excursion day is a day during which one or more daily value is outside the allowable range. "Daily value" means the average of all samples collected during a day at a single location.

The WQP results must be electronically submitted to the Department of Environmental Quality (DEQ). Essentially, the city will continue to submit a daily and monthly report for the treatment facility and a weekly EWDM summary for the distribution system.

If there are any comments or questions, please contact me.

Sincerely,



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Drinking Water and Municipal Assistance Division  
989-450-7834

cc: Genesee County Health Department  
Robert Jones, F and V Operations  
Thomas Speth, USEPA ORD  
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Via email: Eric Oswald, DEQ  
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