



Fact Sheet – Water Quality Parameters

for Optimal Monitoring

(Ver 1.1, May 31, 2017)

Introduction

- Optimal Water Quality Parameter (OWQP) monitoring is applicable to Community and Nontransient Noncommunity Water Systems that have installed Corrosion Control Treatment (CCT) for the purpose of reducing levels of lead and/or copper, and have State set OWQP minimums.
- OWQP monitoring results will help the system and the State determine whether CCT is being properly operated and maintained following installation and completion of Follow-up WQP monitoring [40 CFR 141.87].
- OWQP monitoring is required following the determination of minimum values and will continue indefinitely.

Sample Sites:

- Entry Point to the Distribution System (EPTDS):
 - Each EPTDS with CCT
 - Active interconnections with CCT
 - Only those active during the monitoring period
- Distribution System (DS):
 - Representative sites throughout the DS
 - The number of sites required is based on the population (see Table)

System size (Population Served)	No. of Standard Distribution Sites	No. of Reduced Distribution Sites
> 100,000	25	10
10,001-100,000	10	7
3,301 to 10,000	3	3
501 to 3,300	2	2
≤ 500	1	1

Sample Point	Required Parameters	Frequency
EPTDS	<ul style="list-style-type: none"> • pH • Alkalinity (Only if adjusted) • Orthophosphate (as P) and/or Silica (Only when an inhibitor containing one of these compounds is used.) • Calcium (Only if adjusted) • Dosage rate and concentration of any CCT chemical feed 	• Biweekly (1 sample every 14 days)
DS	<ul style="list-style-type: none"> • pH • Alkalinity (Only if adjusted) • Orthophosphate (as P) and/or Silica (Only when an inhibitor containing one of these compounds is used.) • Calcium (Only if adjusted) 	<ul style="list-style-type: none"> • 2 consecutive 6-month periods starting Jan 1 or Jul 1. • 2 sets of samples from each site on different days in each period. • Recommend collecting 1 set/quarter.

Excursions and Action Plans

- An excursion occurs when any daily value for a WQP is below the minimum value set by the State.
- An excursion is unresolved until the system collects a sample at the same location that meets the minimum value.
- A treatment technique (TT) violation is when 9 or more excursions take place within a 6-month monitoring period.
- Action Plans for single excursions, TT violations, and Monitoring & Reporting (M&R) violations should be included in the WQP Sampling Plan.
- The Action Plans should detail the required follow-up, including the appropriate public notice, changes to WQP and lead and copper monitoring, and possible treatment evaluation.

Reduced Monitoring

- Applicable to systems serving more than 10,000 persons and only with NJDEP approval.
- If OWQPs are maintained during 2 consecutive 6-month monitoring periods - may reduce the number of DS sites (See Table above).
- If OWQPs are maintained during 3 consecutive years of monitoring - may reduce sampling to annually.
- If OWQPs are maintained during 3 consecutive years of annual monitoring - may reduce sampling to triennial.
- Reduced monitoring only applies to DS sampling. EPTDS monitoring will remain biweekly.

Additional Resources:

DEP Lead in Drinking Water - Public Water System Information Including WQP Guidance:

<http://www.nj.gov/dep/watersupply/dwc-lead-public.html>

EPA WQP Compliance: <http://www.state.nj.us/dep/watersupply/pdf/wqp-guidance.pdf>

EPA Optimal CCT Evaluation: www.epa.gov/sites/production/files/2016-03/documents/occtmarch2016.pdf

For further assistance, please contact the Bureau of Water System Engineering at

609-292-2957 or watersupply@dep.nj.gov