



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITORING GUIDANCE FOR INITIAL WATER QUALITY PARAMETERS (WQP)

Public Water Systems (PWSs) that are required to sample WQPs

- PWS that have a population over 50,000
- PWSs that exceed the lead and/or copper action levels
- PWSs that have had a long term treatment or source water change
- All newly established PWSs of any size

WQPs are used to help determine if water is considered corrosive or aggressive and to aid in determining effective types of corrosion control treatment that a PWS may install. Initial/routine WQP monitoring is required by all newly established PWSs during the year following the year that the system is activated. PWSs that exceed the lead or copper action levels or have reduced lead and copper schedules removed due to a long term treatment or source water change are also subject to WQP sampling. When treatment for lead and/or copper exceedances are required, corrosion control treatment is the primary mechanism for reducing lead and copper levels.

A. MONITORING PERIOD

In accordance with 30 Texas Administrative Code (TAC) Section 290.117(e)(1)(B), monitoring periods are January 1 - June 30 and July 1 - December 31.

B. NUMBER OF SAMPLES

During each of the six month periods, TCEQ requires WQP samples to be taken twice during the six month monitoring period - or quarterly - in both the distribution system and at each entry point to the distribution system.

B. DISTRIBUTION SYSTEM SAMPLES:

In accordance with 30 TAC §290.117(e)(1)(B), samples shall be representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods employed by the systems, pressure zones, and seasonal variability. Sites that are normally used for bacteriological monitoring or other appropriate system locations that represent water quality throughout the entire distribution system should be used for sampling.

| System Size (# of People Served) | Initial/Routine # of Sites for WQPs |
|----------------------------------|-------------------------------------|
| >100,000 | 25 |
| 10,000 - 100,000 | 10 |
| 3,301 - 10,000 | 3 |
| 501 - 3,300 | 2 |
| 101 - 500 | 1 |
| <101 | 1 |

C. ENTRY POINT SAMPLES:

In accordance with 30 TAC §290.117(e)(1)(A), samples collected at the entry point(s) to the distribution system shall be from locations representative of each source after treatment and before distribution.

D. WQP CHAIN OF CUSTODY/REPORTING FORM 20679:

WQP's are to be reported using the TCEQs WQP Chain of Custody Form 20679. pH and temperature are recorded in the field with collection, method, and analyzed date and time using Form 20679. Label the 1 liter bottles EP001, EP002, etc. or DS01 with location and send the Form 20679 with the bottles to the laboratory for analyzing. Some of the WQP's require icing, TCEQ recommends you contact your analyzing laboratory for directions. Laboratories are to be NELAC accredited or approved through the TCEQ laboratory certification program. Approved laboratories can be found by reviewing the TCEQ's Lead and Copper website under Laboratories.

E. WATER QUALITY PARAMETERS TO BE MONITORED AND REPORTED:

| Analyte Code | Analyte Name |
|--------------|------------------------------|
| 1927 | Alkalinity |
| 1919 | Calcium |
| 1017 | Chloride |
| 1064 | Conductivity |
| 1915 | Hardness |
| 1028 | Iron |
| 1032 | Manganese |
| 1925 | pH * |
| 1052 | Sodium |
| 1055 | Sulfate |
| 1996 | Temperature in Celsius * |
| 1930 | Total Dissolved Solids (TDS) |
| 1044 | Orthophosphate ** |
| 1049 | Silica *** |

- *Field study - collection/analyzed must be as soon as possible and within 15 mins.
- **Orthophosphate must be measured if an inhibitor containing a phosphate compound is used.
- ***Silica must be measured in an inhibitor containing silicate compound is used.

F. LABORATORY APPROVED ANALYTICAL METHODS FOR WQPs:

Approved analytical methods for WQPs associated with the Lead and Copper Rule are found at 30 TAC §290.117(h)(2) and 40 CFR §141.23(k)(1).

G. LABORATORY REPORTING:

All analyzing laboratories are required to report the TCEQ Form 20679 along with analytical results in pdf format using email in the format found in the *Quality Assurance Project Plan, Laboratory Guidance for the Analysis and Reporting of Water Quality Parameters Under the Lead and Copper Rule, Addendum #3, effective November 4, 2016*. This document can be found on the TCEQ Lead and Copper website. Only results that are marked “compliance” with a completed TCEQ Form 20679 and attached analytical results will be considered for compliance samples and will count towards monitoring requirements under the Lead and Copper Rule.

H. OPTIMAL CORROSION CONTROL TREATMENT EVALUATION TECHNICAL RECOMMENDATIONS DOCUMENT:

EPA guidance document provides technical recommendations that PWSs can use to comply with Lead and Copper Rule (LCR) corrosion control treatment requirements and effective evaluation and designation of optimal corrosion control treatment (OCCT). This document can be found on the TCEQ Lead and Copper website.