



DISINFECTANTS AND DISINFECTION BYPRODUCTS AREA-WIDE OPTIMIZATION PROGRAM (AWOP)



ENERGY AND ENVIRONMENT CABINET

For a water system to be recognized, the system must:
 1) Submit a letter of commitment outlining system goals to Drinking Water Technical Assistance (DWTA) and post system goals at the facility.
 2) Submit supporting documentation to appropriate DWTA contact.

D/DBP AWOP CERTIFICATION CRITERIA:

- ◆ Surface Water or GWUDI Treatment Plant
- ◆ Meet all D/DBP Optimization Goals for the calendar year
- ◆ No D/DBP violations for the calendar year

GOLD SEAL RECOGNITION:

- ◆ Consecutive systems in compliance with the Stage 2 DBP Rule.

D/DBP AWOP CHAMPION AWARD CRITERIA:

- ◆ Meet D/DBP optimization criteria for 3 consecutive years
- ◆ No SDWA violations (M/R or TT) for the 3 year evaluation timeframe
- ◆ No exclusion of systems based on prior receipt of the D/DBP Champion Award

SURFACE WATER & GWUDI TREATMENT PLANT

Parameters	Goal	Sample Location	Assessment Timeframe	Minimum Sampling Frequency
TOC Performance Ratio	≥ 1.0	Raw/CFE	Quarterly	Meet System Specific Monitoring Requirements
TTHM Plant Tap	≤ 30 ppb	Plant Tap	4 Quarters Running Annual Average	Quarterly
HAA5 Plant Tap	≤ 20 ppb	Plant Tap	4 Quarters Running Annual Average	Quarterly
CT	Meet CT requirements	Multiple Zones	Daily	Daily

TREATMENT PLANTS THAT UTILIZE CHLORAMINE

Parameters	Goal	Sample Location	Assessment Timeframe	Minimum Sampling Frequency
Free Ammonia	≤0.10 mg/L as NH ₃ -N	Plant Tap	Daily	Daily
Chlorine-to-Nitrogen or Chlorine-to-Ammonia Mass Ratio	4.5:1—5.0:1 or 3.7:1—4.1:1	Plant Tap	Daily	Daily

DISTRIBUTION SYSTEM

Parameters	Goal	Sample Location	Assessment Timeframe	Minimum Sampling Frequency
TTHM Individual Site LRAA	≤ 70 ppb	All Stage 2 Compliance Locations	4 Quarters Locational Running Annual Average	Quarterly
HAA5 Individual Site LRAA	≤ 50 ppb	All Stage 2 Compliance Locations	4 Quarters Locational Running Annual Average	Quarterly
TTHM Long Term	≤ 60 ppb	All Stage 2 Compliance Locations	8 Quarters Average Maximum Locational Running Annual Average	Quarterly
HAA5 Long Term	≤ 40 ppb	All Stage 2 Compliance Locations	8 Quarters Average Maximum Locational Running Annual Average	Quarterly
Free Chlorine (Free Chlorine Systems Only)	≥ 0.2 mg/L	Representative of the Distribution System	Daily	Daily
Monochloramine (Chloramine Systems Only)	≥1.5 mg/L* Monitor Free Ammonia	Representative of the Distribution System	Monthly	Monthly; (more may be needed) *Monitor Nitrate if Monochloramine is <1.50 mg/L

SPECIAL POINTS OF INTEREST:

- ◆ Optimization strives for excellence beyond regulatory requirements
- ◆ Optimization provides a safety factor for achieving compliance
- ◆ Optimization provides increased public health protection
- ◆ Optimization focuses on improving operation of existing facilities without making expensive capital improvements

DISTRIBUTION SYSTEM GOALS CALCULATION:

- ◆ The Individual Site Goal is an average of the most recent 4 quarters of compliance data at each site (LRAA).
- ◆ The Long Term Goal is the average of the maximum quarterly LRAA of all sites for 8 consecutive quarters.

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