Stage 1 DBPR

Conclusion

Summary of Requirements

Disinfectants:
- Chlorine and Chloramines MRDL = 4.0 mg/L
- Chlorine Dioxide MRDL = 0.8 mg/L

Byproducts:
- TTHM MCL = 0.080 mg/L
- HAA5 MCL = 0.060 mg/L
- Chlorite MCL = 1.0 mg/L
- Bromate MCL = 0.010 mg/L

Precursors:
- RAA of TOC removal ratio $\geq$ 1.00
- Treatment Technique – TOC Removal requirements depend on source water characteristics

Routine Monitoring

	Monitoring Frequency	Monitoring Location
Chlorine & Chloramines	Same as TCR	Same as TCR
TTHM & HAA5	Quarterly/Annually during warmest water month	Location of Maximum Residence Time
DBP Precursors	Monthly	Source Water (alkalinity and TOC) & Treated Water (TOC)

Reduced Monitoring

	Monitoring Frequency	Monitoring Location
Chlorine & Chloramines	Same as TCR	Same as TCR
TTHM & HAA5	**GW < 10,000:** 1 per 3-year cycle in warmest water month **Subpart H 500 - 9,999 & GW ³ 10,000:** annually	Same as routine
DBP Precursors	1 set (3 samples) per Quarter	Same as routine

Increased Monitoring

	Monitoring Frequency	Monitoring Location
Chlorine & Chloramines	Same as TCR	Same as TCR
TTHM & HAA5	Quarterly	Same as routine
DBP Precursors	Not applicable	Not applicable

Compliance Determination

Chlorine & Chloramines	RAA of monthly averages calculated each quarter
TTHM & HAA5	RAA of quarterly averages calculated each quarter
DBP Precursors	Depends on criteria used to comply

Other Considerations

- Changes to disinfection process
- Compliance with LT1ESWTR and other rules
- Monitoring plans
- Additional state requirements
  - State flexibility
- Qualified operators
- Stage 2 DBPR

Additional Resources

U.S. EPA's Simple Tools for Effective Performance (STEP) Guide Series:

- *Complying With the New Stage 1 Disinfectants and Disinfection Byproducts Rule: Version A*
- *Complying With the New Stage 1 Disinfectants and Disinfection Byproducts Rule: Version B*

*These are currently under development

Additional Resources

Other Resources:

- *The Stage 1 Disinfectants and Disinfection Byproducts Rule: What Does it Mean to You?* (EPA 816-R-01-014)
- *Microbial and Disinfection Byproduct Rules Simultaneous Compliance Guidance Manual* (EPA 815-R-99-015)
- EPA website: M-DPB Rules: Implementation Activities http://www.epa.gov/safewater/mdbp/implement.html

Contact Information

Safe Drinking Water Hotline:

- 800-426-4791

Email Trainers:

- sdwatraining@epa.gov (until October 24, 2003)

EPA Website:

- http://www.epa.gov/safewater/