

GWR: Things to consider?

Joaquin Montes
TCEQ

Preparation & Cost

- Multiple GW sources?
- Hydrogeology?
- Sample history?
- Do I have 4 log treatment already?
- Treatment monitoring costs?
- Do I need a consultant or is collecting a source sample(s) more affordable?

Options?

- What is my sample history?
- Should I do a Triggered source monitoring plan (TSMP)?
- Should I claim 4 log treatment of viruses?

Sample History

- Got distribution positives?
- Do you already have to collect source samples?
- How is your PWS's infrastructure?
- Do you have a maintenance and upkeep log?

TSMP considerations

- Well is in a HGSA
- Multiple GW wells
- Use chloramines
- Not enough storage

4-log (99.99%) treatment

- I use free chlorine
- I have the TCEQ MSR calculator form and can obtain the required residual
- I can handle the compliance monitoring
- I can handle the reporting requirements
- I know the worst case scenario is a treatment technique violation

4-log Requirements for Existing Sources

- Source Monitoring is not required, if PWS:
 - Notifies TCEQ of 4-log treatment before Dec 1, 2009
 - Provides engineering / operational information to TCEQ for evaluation
 - Monitors effectiveness / reliability of treatment

4-log Requirements for New Sources

- Source monitoring is not required, if PWS:
 - Notifies TCEQ of 4-log treatment
 - Provides engineering / operational information to TCEQ for evaluation
 - Monitors effectiveness / reliability of treatment **within 30 days** of placing source in service

Compliance Monitoring Chemical Disinfection

- PWS with population > 3,300
 - Must continuously monitor disinfectant
 - Must maintain TCEQ-specified residual
- PWS with population < 3,300
 - Must monitor disinfectant daily
 - Must maintain TCEQ-specified residual

Reporting for PWS

- Must notify TCEQ if fails to meet 4-log treatment of viruses by next day

Treatment Technique Violations

- Fails to maintain 4-log treatment of viruses

30-Day PN Required

- When a GW PWS fails to:
 - Maintain 4-log treatment of viruses

90-Day PN Required

- When a GW PWS fails to:
 - Conduct monitoring to demonstrate compliance with 4-log treatment requirement

Recordkeeping for PWS

- Records of TCEQ-specified minimum residual disinfectant concentration
- Records of lowest daily residual with date and duration of failure to meet specified minimum
- Records of compliance for membrane filtration
- Public Notice documentation