Common RTCR Assessment Findings



Mia Gonzales
Revised Total Coliform Rule

TCEQ Public Drinking Water Conference-2020

Overview



- Goal of assessment
- Assessment triggers
- Documents to include with your submittal
- Common issues on the assessment
- Sanitary defects, additional corrective actions, and best management practices

Goal of Assessment



To find out why your sample is total coliform positive (TC+) and take action by improving processes and making repairs.

assessment is not a violation

How to Avoid Assessment When and Where to Sample



- Collect samples early in the month, early in the week
- Don't take samples during inclement weather
- Have an up-to-date Sample Siting Plan
- Evaluate your sample site each time and chose a different site is something is wrong with the current one





- Follow-up with the lab to get your sample results
- Take all your repeat samples
- Keep you residual up
- Regular flushing of your lines

How to Avoid the Assessment Avoid Problem Sample Sites





This is not a good sample site, can easily fill with water or mud.

Assessment Triggers



Level 1 Assessment

- PWS collecting less than 40 samples/month, 2 or more TC+ samples in 1 month
- PWS collecting 40 or more samples/month,
 more than 5.0% TC+ samples in 1 month
- PWS does not collect ALL repeats

Level 2 Assessment

- PWS has an E. coli MCL(this is a violation!)
- PWS has a 2nd Level 1 within 12 months

E. Coli MCL



- Routine TC+ → Repeat E. coli+
- Routine E. coli+ → Repeat TC+
- Routine E. coli+ → not all repeats collected

Completing the Assessment



- Call RTCR if you have questions
- Read each sentence carefully
- Level 1: If you feel it is needed add to Section 11 Add'l Issue Description
- You CAN EMAIL the assessment and documents to TCRData@tceq.texas.gov

Documents to Include



Level 1 and 2 Assessment

- Signed and completed form
- Any other relevant information

Level 1 Assessment

- Disinfectant residuals leading up to the TC+
- Your Coliform Sample Collection SOP

Documents to Include



If you had a Sanitary Defect

- Documents to show corrective action was taken/repaired/resolved
 - Pictures
 - Invoices
 - Maintenance logs
 - Should include date(s) of repair

Sample Siting Plan



- Create one
- Keep it updated
- Keep it on site
- Will help you "find" a different sample site quickly if a current one is unsuitable
- Send the SSP to TCEQ

Common Issues



Call TCEQ if you have any questions

Common Issues Sample Locations



- Create a coliform sample collection SOP and use it
- Evaluate your sample site each time and chose a different site if something is wrong with the current one (SSP!!!)
- Disinfect your sample tap
- Don't collect in a kitchen, bathroom

Common Issues Sample Location (continued)



- Don't sample in inclement weather
- Follow the proper sample collection procedures
- Flush your water lines on a regular basis
- Remove anything that is attached to the sample tap (or chose a different site!!)
- Sample tap and immediate area should be in good condition and sanitary
- Disinfect the tap

Operations and Maintenance



- Disinfectant residual should ALWAYS be above 0.2 mg/L free chlorine or 0.5 mg/L chloramine
- Flush on a regular basis
- If you use chloramines make sure you have a nitrification action plan
- Tanks in good condition
- Chlorinators working properly

Operations and Maintenance (continued)





Bird nest is a hazard next to those wires

What is a Sanitary Defect?



- A defect that could allow microbial contamination to enter your distribution system
- A defect in a current barrier against microbial contamination
- Is going to allow or probably will allow microbial contamination

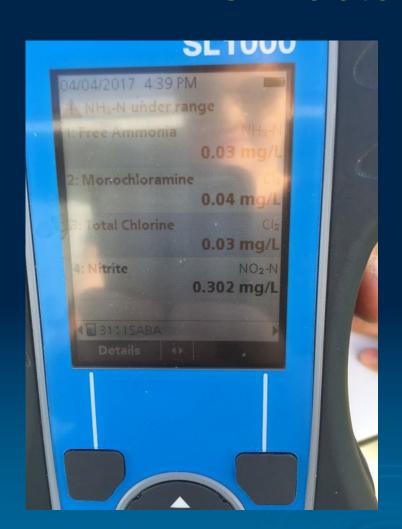
Sanitary Defect



- Failure to maintain a stable disinfectant residual
- Failure to maintain minimum pressure
- Failure to fix a major leak
- Storage tank in disrepair
- Screens on wells/tanks missing/loose

Sanitary Defect Disinfectant Residual

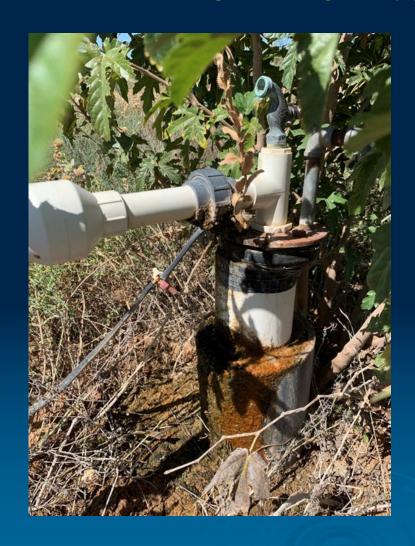




Failure to maintain a stable disinfectant residual

Sanitary Defect Well Maintenance





Failure to properly maintain a well.

Sanitary Defect Ground Storage Tank







Failure to properly maintain a ground storage tank.

Sanitary Defect Minimum Design Criteria



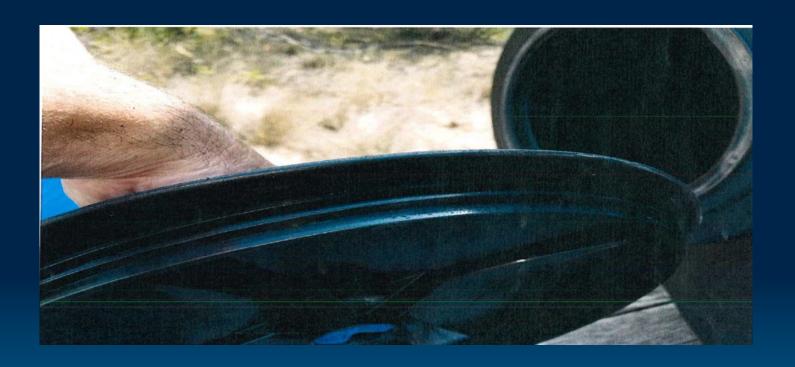


Failure to use a ground storage tank that meets minimum design criteria.

(There is no approved exception for this PWS).

Sanitary Defect Water Hauling Tank

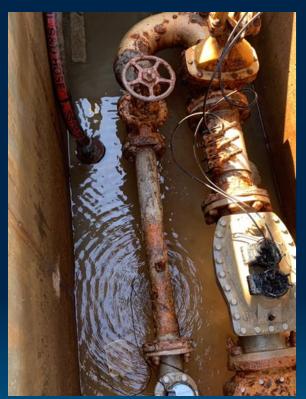




Failure to use a water hauling tank that meets minimum design criteria.

Sanitary Defect Watertight System



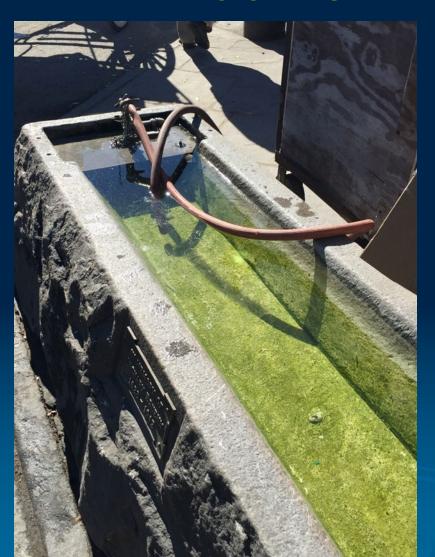




Failure to maintain the system in a watertight condition.

Sanitary Defect Backflow Prevention





Failure to provide a backflow prevention assembly or air gap to protect against an actual or potential contamination hazard.

What is an Additional Corrective Action?



Rule based requirements that are not considered sanitary defects. Region will evaluate these items during the next Comprehensive Compliance Investigation.

Additional Corrective Action

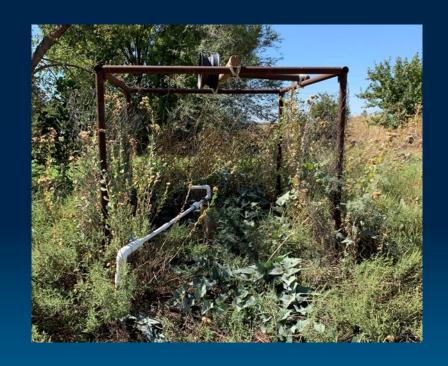


Failure to have/complete:

- Monitoring plan
- Sample siting plan
- Nitrification action plan for PWS using chloramine
- Raw well tap
- Verification of equipment
- Cross connection control program

Additional Corrective Action (continued)







What is a Best Management Practice?



A recommendation the PWS should follow, methods that have been determined to be the most effective and practical. Do not have to follow our BMP exactly, encouraged to draft your own policies as long as they are effective.

Best Management Practice (continued)



- Standard operating procedures for collecting coliform samples
- Standard operating procedures for collecting disinfectant residuals
- Coordinating with the lab in reference to coliform samples

Resources



Drinking Water Watch www.tceq.texas.gov/goto/dww

Drinking Water Section (512) 239-4691

RTCR Program

TCRData@tceq.texas.gov

Boil Water Notice BWN@tceq.texas.gov

Additional Assistance Programs



Free Financial, Managerial, and Technical Assistance (FMT)

(512) 239-4691

FMT@tceq.texas.gov

Small Business and Local Government
Assistance (SBLGA)
(800) 447-2827
www.TexasEnviroHelp.org

Questions?



Mia Gonzales

Revised Total Coliform Rule Drinking Water Assessment Team

(512) 239-6576 mia.gonzales@tceq.texas.gov