**Revised Total Coliform Rule (RTCR)**

**Level 1 Assessment Form**

# Level 1 Assessment Information

* The **Level 1 Assessment** is an evaluation of your water system to identify the presence of **sanitary defects**, inadequate coliform monitoring practices, and the likely reason the PWS received positive coliform results. **A sanitary defect is a pathway for microbial contamination to enter the distribution system, or an indication of a current or impending failure of a barrier already in place.**
* If sanitary defects are identified during the assessment, they must be listed, described, and addressed with an associated corrective action. See Section 8 for additional information on how to record – Sanitary Defects and Corrective Actions.
* At any time during the assessment or corrective action phase, the PWS or TCEQ may request a consultation with the other party to determine appropriate actions. The PWS shall consult with the TCEQ on all relevant information that may impact its ability to complete the Level 1 Assessment and/or corrective actions.
* The TCEQ-approved Level 1 Assessment form shall be completed and submitted to the TCEQ as soon as practical, **but no later than 30 days** **after the PWS learns that it has exceeded a trigger, or 30 days after all routine and repeat monitoring was required to be completed for the calendar month in which the system exceeded the trigger, whichever is earlier.**
* Submit the signed Level 1 Assessment form, any supporting documentation concerning sanitary defects and associated corrective actions **to the TCEQ via email to** **TCRData@tceq.texas.gov****. You can also mail the form to TCEQ Attn: WSD/RTCR/L1A, MC-155 PO Box 13087 Austin, Texas 78711-3087**. The TCEQ suggests you send the documents by email so they can be received immediately.
* If the PWS would like free financial, managerial, or technical (FMT) assistance to complete the Level 1 Assessment or associated corrective actions, the PWS may request onsite training by contacting FMT@tceq.texas.gov or call (512) 239-4691 and ask to speak to an FMT Assistance staff member.

# Public Water System Information

| PWS Name: |  | PWS ID: |  |
| --- | --- | --- | --- |
| Trigger Date: |  | Completion Date: |  |

# Required Documentation

Please check that the required records are attached.

| Coliform Sample Collection Standard Operating Procedure |  |
| --- | --- |
| One month of disinfectant residual data leading up to the assessment trigger |  |

# Instructions

Answer the following questions by checking the appropriate response for each question. Please keep in mind that this assessment is meant to be an evaluation of your water system and should reflect the operations that were ongoing during the time of the treatment technique trigger.

# Section 1: Coliform Sample Sites

Evaluate all total coliform-positive sites.

| **Questions** | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- |
| 1. Does the coliform sample tap have an attachment? (e.g., Y- type attachment, aerator, point of use device, etc.) |  |  |  |
| 2. ***IF*** the sample tap has an attachment, was it removed before sample collection?  |  |  |  |
| 3. Does the connection have point of use treatment? (e.g., water softener or filter) |  |  |  |
| 4. Were any plumbing repairs and/or additions made to the sample site? |  |  |  |
| 5. Is the sample tap or site unsanitary? (e.g., excessive vegetation, animal droppings, non-potable irrigation) |  |  |  |
| 6. Is the height of the sample tap sufficient to avoid splash back? (e.g., approximately 12-18 inches above the ground)  |  |  |  |
| 7. Is the sample tap subject to flooding and/or excessive runoff? |  |  |  |
| 8. Is the sample tap located on or near a dead end main?  |  |  |  |
| 9. Is the sample tap located on an interior location that is used for other activities? (e.g., bathroom, kitchen, janitorial, or commercial sinks) |  |  |  |
| 10. Is the sample tap in good condition and free of leaks? |  |  |  |
| 11. Can the sample tap be adjusted for an even low flow of water without excessive splash during sample collection? |  |  |  |

# Section 2: Coliform Sample Protocol and Collection

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Were all samples collected according to a coliform sample collection Standard Operating Procedure? |  |  |  |
| 2. Were all samples collected according to the system’s Sample Siting Plan? |  |  |  |
| 3. Was the sample tap flushed until the minimum required 0.2 mg/L free chlorine or 0.5 mg/L total chlorine residual was present prior to collection? |  |  |  |
| 4. Was the sample tap swabbed/sprayed with disinfectant or flamed before sample collection? |  |  |  |
| 5. Was the sample collected from a cold-water tap? |  |  |  |
| 6. Was a sterile laboratory-provided total coliform sample bottle used? |  |  |  |
| 7. Did the sampler ensure that the sample bottle was not rinsed or overfilled prior to or during sample collection? |  |  |  |
| 8. Were the samples delivered in a clean cooler? |  |  |  |

# Section 3: Distribution System

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Are all pumps, valves, and meters maintained and operational? |  |  |  |
| 2. Was there water line construction or distribution line leaks near the positive sample site? |  |  |  |
| 3. ***IF*** there was construction or line leaks, were they repaired and disinfected in accordance with American Water Works Association standards? |  |  |  |
| 4. Was there unusual water demand around the time of the total coliform- positive event? |  |  |  |
| 5. Did pressure drop below 20 psi anywhere in the distribution system? |  |  |  |
| 6. ***IF*** the pressure dropped below 20 psi anywhere in the distribution system, were required "Special Precautions" followed as listed in 30 TAC §290.47(c)? |  |  |  |
| 7. Were there any residual disinfectant concentrations below 0.2 mg/L free chlorine or 0.5 mg/L total chlorine in the affected area? |  |  |  |
| 8. ***IF*** there are any air release devices in the affected area(s), are they installed in such a manner as to prevent the possibility of contamination? |  |  |  |
| 9. Is the PWS ensuring effective circulation throughout the distribution system? |  |  |  |
| 10. Are all dead-end mains flushed at monthly intervals and dead-end lines and other mains in the affected area(s) flushed as needed? |  |  |  |
| 11. Has nitrification occurred anywhere in the distribution system around the time of the total coliform-positive event? |  |  |  |
| 12. ***IF*** nitrification has occurred, did the PWS implement provisions of its Nitrification Action Plan as required? |  |  |  |
| 13. ***IF*** the PWS uses total chlorine, has the PWS performed a temporary chlorine conversion around the time of the total coliform-positive event? |  |  |  |
| 14. Are all water distribution lines protected against contamination from wastewater mains and/or laterals? |  |  |  |
| 15. Are appropriate backflow prevention assemblies and/or air gaps installed at every connection with a potential health hazard? |  |  |  |
| 16. Are all backflow prevention assemblies functioning properly and tested as applicable? |  |  |  |
| 17. Was the distribution water impacted by any backflow-event? |  |  |  |

# Section 4: Water Storage and Pressure Tanks

If the PWS does not use any water storage tanks or pressure tanks, skip this section.

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Are all pressure tanks maintained and operational? |  |  |  |
| 2. Have all pressure tank exteriors been inspected in the past year? |  |  |  |
| 3. Have all pressure tanks with inspection ports had an interior inspection in the past five years? |  |  |  |
| 4. Are all water storage tanks maintained and operational? |  |  |  |
| 5. Have all water storage tanks been inspected in the past year? |  |  |  |
| 6. Have all issues found during tank inspections been addressed? |  |  |  |
| 7. Are all water storage and/or pressure tanks thoroughly tight against leakage? |  |  |  |
| 8. Are all water storage tank openings and roof vents screened with 16-mesh or finer screen? |  |  |  |
| 9. Do all water storage tank overflows have a cover that closes automatically with no gap larger than 1/16 inch? |  |  |  |
| 10. Is the PWS managing water turnover in finished water storage tanks? |  |  |  |
| 11. Does any tank have excessive sediment? |  |  |  |
| 12. Were any residual disinfectant concentrations below the required minimum 0.2 mg/L free chlorine or 0.5 mg/L total chlorine in any water storage tanks? |  |  |  |
| 13. Are all water storage tanks located away from hazards? |  |  |  |

# Section 5a: Groundwater Wells

If the PWS does not have groundwater wells, skip this section. **If the PWS has groundwater under the direct influence of surface water (GUI) you must complete this section.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Does the PWS own and protect land within 150 feet of each well? |  |  |  |
| 2. ***IF*** the PWS does not own all the land within 150 feet of the well, does every well have a sanitary control easement (SCE)? |  |  |  |
| 3. ***IF*** every well does not have an SCE, does the system have an SCE exception? |  |  |  |
| 4. Are there known hazards within 50 - 500 feet of any well, such as a septic system, septic drain field, storm sewer, or livestock? |  |  |  |
| 5. Is the wellhead and pump base sealed properly to prevent contamination? |  |  |  |
| 6. Are all vents and air release devices covered with 16-mesh or finer screen? |  |  |  |
| 7. Has an unusual raw water contamination or flooding incident occurred at the well site? |  |  |  |

# Section 5b: Purchased Water

If the PWS does not purchase water, skip this section.

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Are all the entry point meters, vaults, and sample taps sanitary? |  |  |  |
| 2. Is the water supplier experiencing issues with coliform bacteria? |  |  |  |

# Section 5c: Surface Water

If the PWS does not use surface water, skip this section.

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Is every surface water intake maintained and operating correctly? |  |  |  |
| 2. Has an unusual raw water contamination incident occurred at the intake site? |  |  |  |

# Section 6: Treatment

If the PWS purchases treated water and does not provide disinfection treatment, skip this section.

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Does the PWS use free chlorine?  |  |  |  |
| 2. Does the PWS use total chlorine? (chlorine and ammonia) |  |  |  |
| 3. Have there been any interruptions and/or changes in treatment? |  |  |  |
| 4. Are all treatment processes maintained and operational? |  |  |  |
| 5. Is all groundwater disinfected prior to distribution and storage? |  |  |  |
| 6. Have all surface water treatment plants and GUI wells met all approved concentration time and turbidity requirements, as applicable? |  |  |  |
| 7. Have all wells met 4-log inactivation requirements, as applicable? |  |  |  |

# Section 7: Security and Extreme Weather

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** |
| 1. Are all water treatment plants, pump stations, water storage tanks, and wells enclosed by an intruder-resistant fence or enclosed in a lockable building? |  |  |  |
| 2. Have any security breaches or vandalism occurred recently or around the time of the total coliform-positive event? |  |  |  |
| 3. Has any extreme weather occurred recently or around the time of the total coliform-positive event? |  |  |  |

# Section 8: Sanitary Defects and Corrective Actions

If the PWS did not identify any sanitary defects (SD) in Sections 1-7 of the form, skip this section and move to **Section 9**.

If **Yes**, describe any SDs and associated CAs in the spaces below. If more than two SDs and associated CAs are found, please include the additional SDs and CAs on a separate page. **Please make sure to include all the information requested.**

**If any corrective actions have been completed, the PWS must submit supporting documentation such as invoices, photographs, etc**. **If any corrective actions have not been completed, the PWS must provide a proposed deadline for TCEQ approval.**

|  |
| --- |
| **Sanitary Defect (SD) and associated Corrective Action (CA)** |
| Section Number: |  |
| **What was the SD identified?** |
|  |
| Date SD identified: |  |
| If CA was completed, date completed: |  |
| If CA was not completed, include a proposed deadline: |  |
| **If CA was completed, you must include supporting documentation with your L1A submittal:** |
| Type/Name of supporting document(s): |
|  |
| What did you do to complete the CA? |
|  |
| How was the CA completed? |
|  |

|  |
| --- |
| **Sanitary Defect (SD) and associated Corrective Action (CA)** |
| Section Number: |  |
| **What was the SD identified?** |
|  |
| Date SD identified: |  |
| If CA was completed, date completed: |  |
| If CA was not completed, include a proposed deadline: |  |
| **If “Yes” you must include supporting documentation with your L1A submittal:** |
| Type/ Name of supporting document(s): |
|  |
| What did you do to complete CA? |
|  |
| How was CA completed? |
|  |

# Section 9: Description of Additional Issue(s) and Comments

The PWS may provide additional information in this section to describe any issues and/or potential causes of contamination.

If more space is needed to provide additional information, please do so on a separate page.

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| --- |
| **Additional Issues and/or Comments** |
|  |
|  |

# Section 10: Signature

Please provide the Assessor and PWS Representative’s contact information.

|  |
| --- |
| **Level 1 Assessor** |
| Name (please print): |  |
| Title: |  |
| Phone Number: |  |
| Email: |  |
| **PWS Representative** |
| Name (please print): |  |
| Title: |  |
| Phone Number: |  |
| Email: |  |
| *“I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”* |
| **PWS Representative Signature:** | **Date:** |
|  |  |