

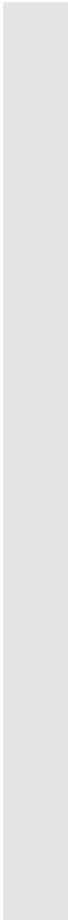
Revised Total Coliform Rule (RTCR) Level 1 Assessments and Corrective Actions

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Water Supply Division
Texas Commission on Environmental Quality
Environmental Trade Fair 2018



Presentation Outline

- Triggering a Level 1 Assessments
- Level 1 Assessments
 - Sanitary Defects
 - Level 1 Assessment Form
- Corrective Actions
 - Corrective Action Report and Plan (CARP)
 - Proof of Corrective Action
- TCEQ Follow-Up



Triggering a Level 1 Assessment

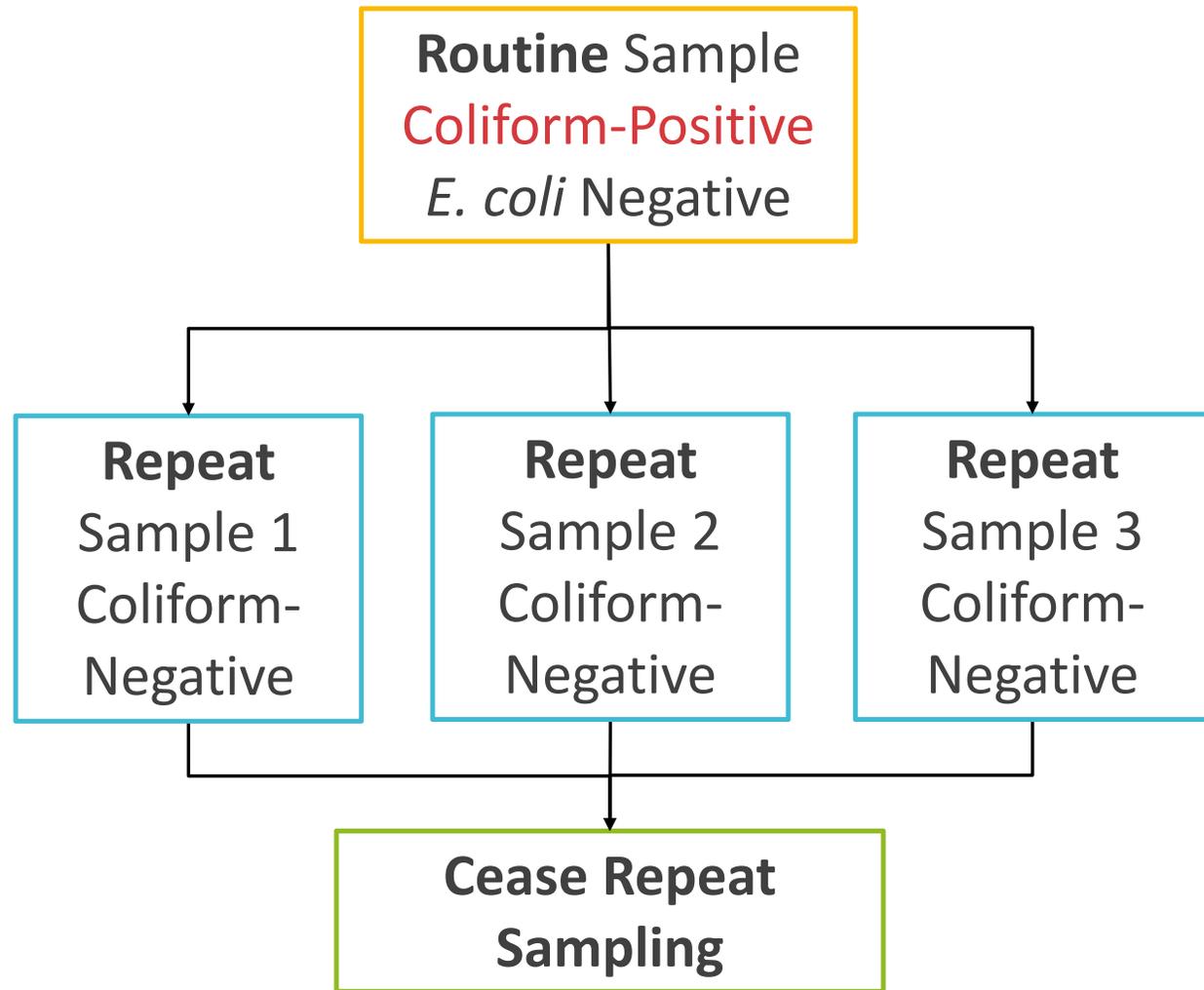
Triggering a Level 1 Assessment

Triggering Events

- Systems collecting 40 or more coliform samples per month: greater than 5.0% total coliform-positive samples in one month.
- Systems collecting fewer than 40 coliform samples per month: two or more total coliform-positive samples in one month.
- All Systems: failure to timely collect every required repeat sample following any single routine total coliform-positive sample.

Triggering a Level 1 Assessment

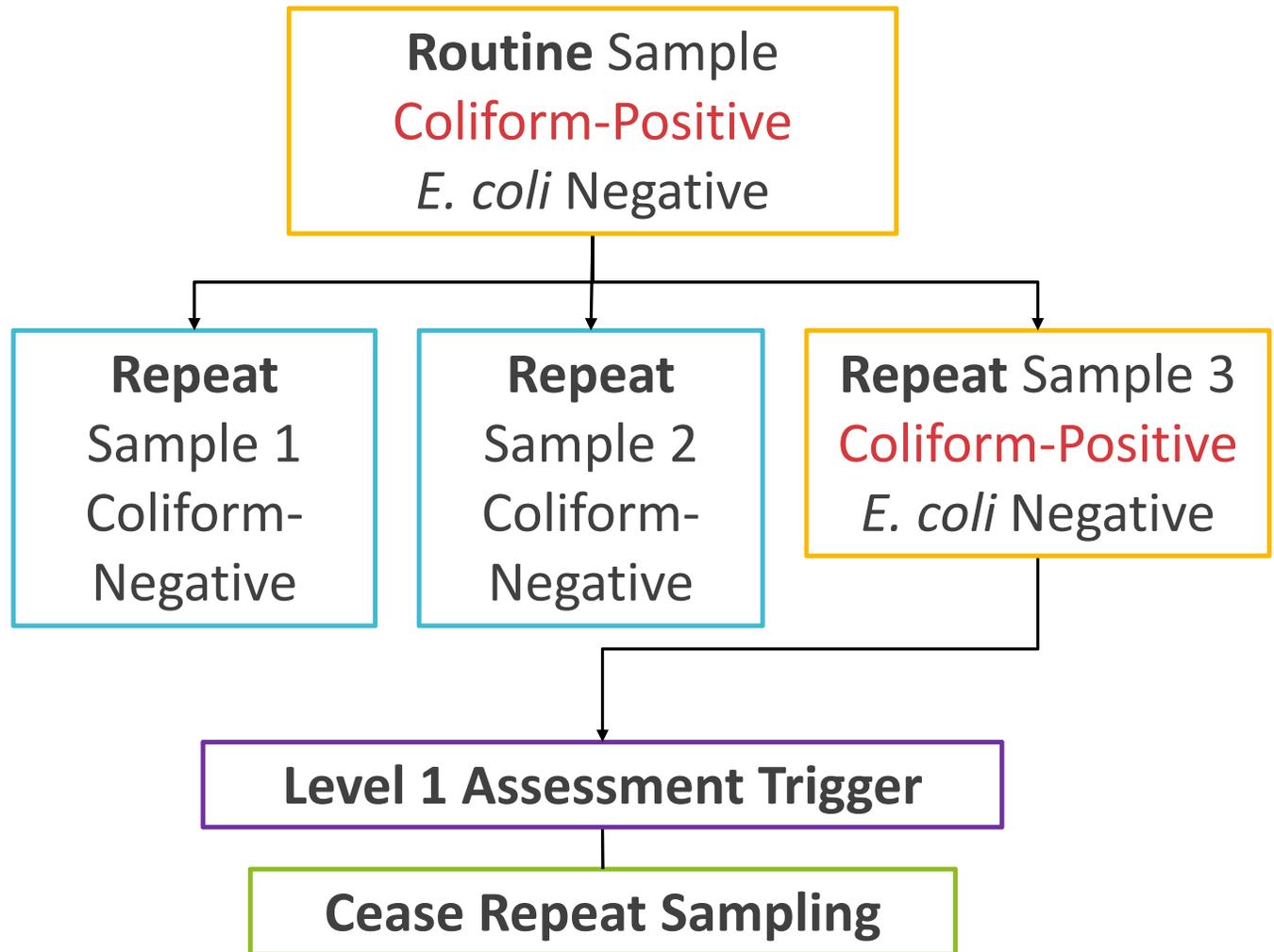
Scenario 1A
System collects fewer than 40 samples per month



Triggering a Level 1 Assessment

Scenario 1B

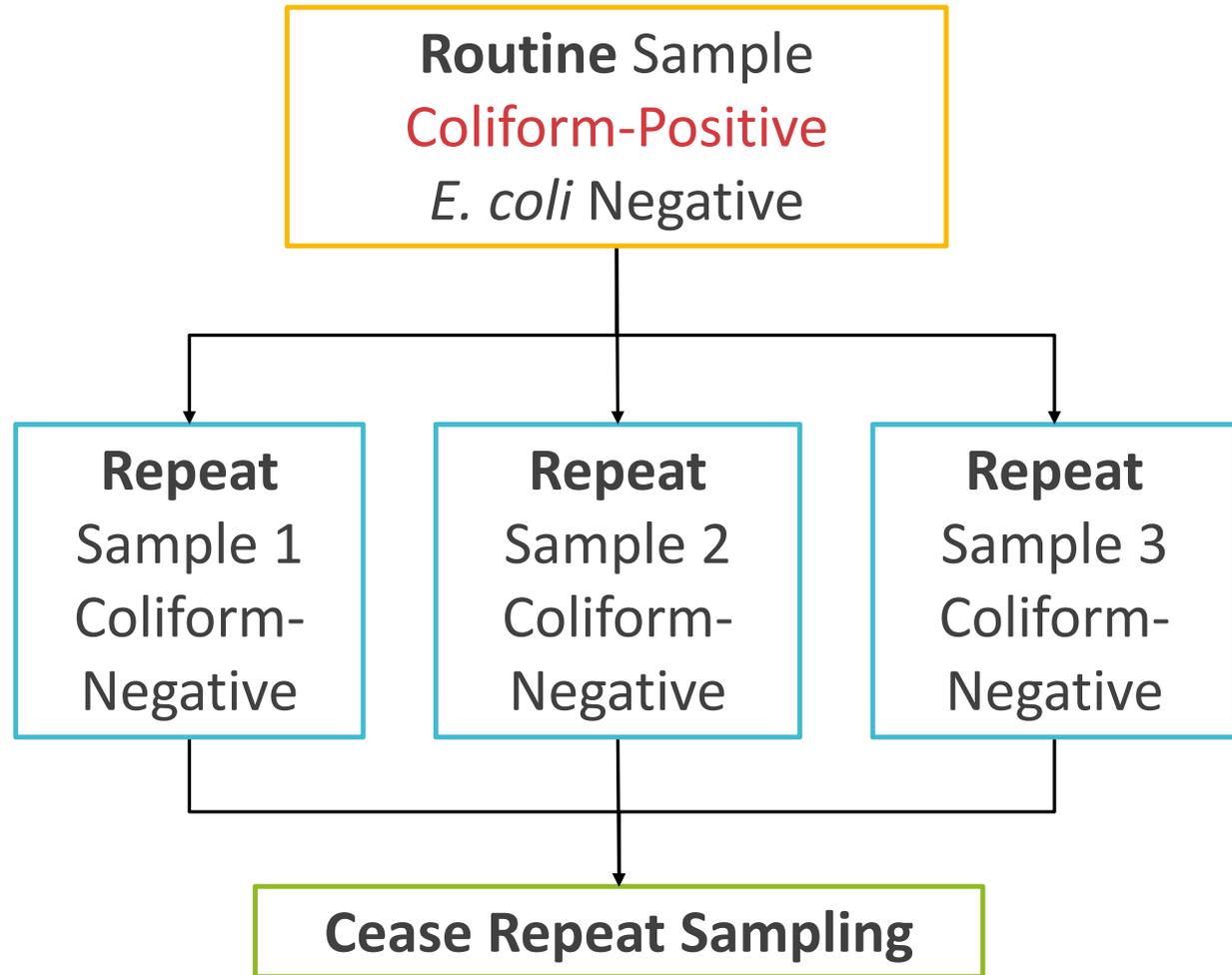
System collects fewer than 40 samples per month



Triggering a Level
1 Assessment

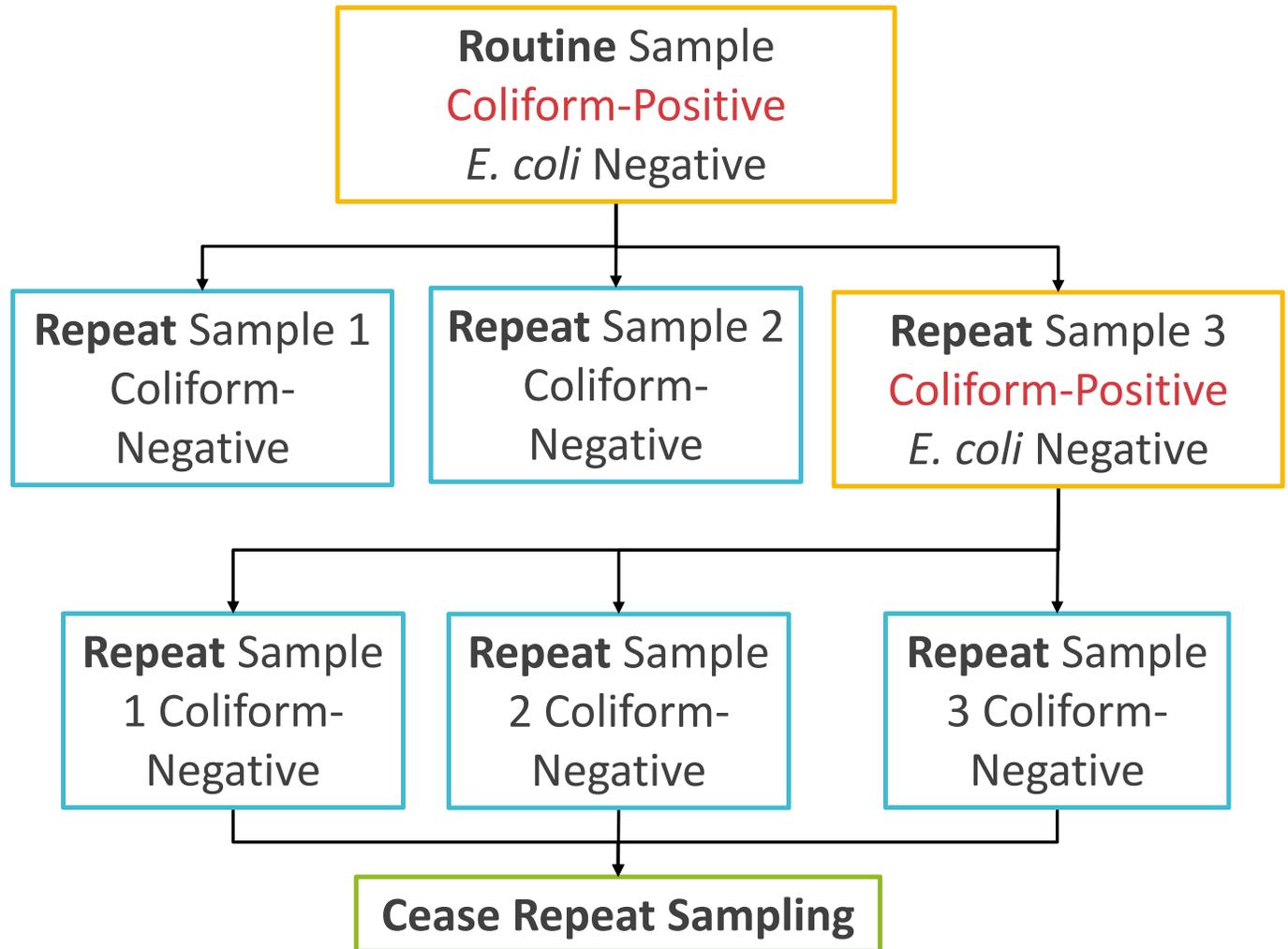
Scenario 2A

System collects 40
or more samples per
month

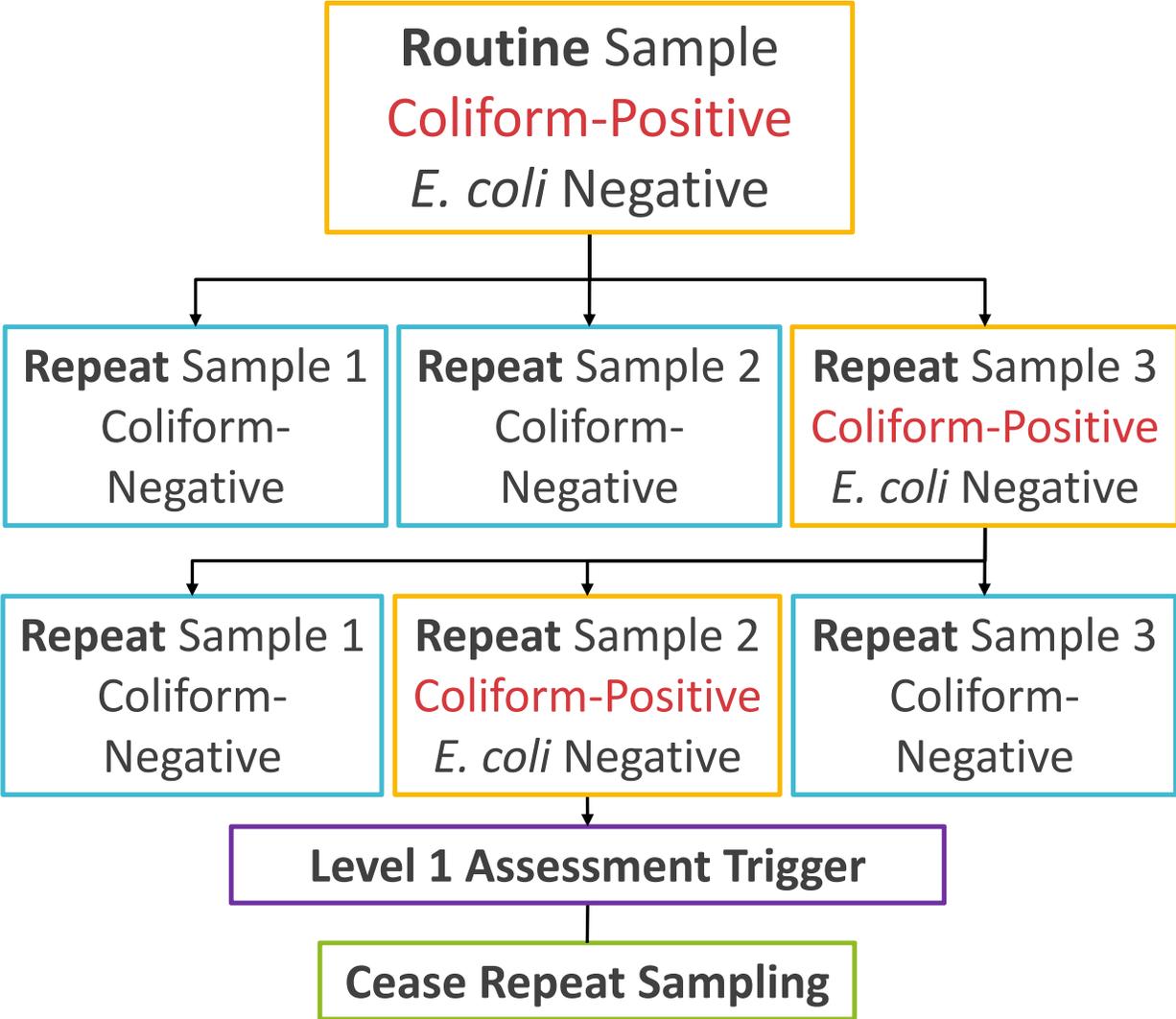


Triggering a Level 1 Assessment

Scenario 2B
System collects 40 or more samples per month



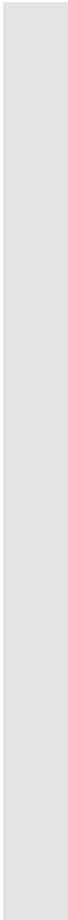
Triggering a Level 1 Assessment
Scenario 2C
System collects 40 or more samples per month and hits the 5.0% trigger



Triggering a Level 1 Assessment

Notes on Triggering a Level 1 Assessment

- Triggering a Level 1 Assessment is not a violation.
 - A Public Notice (PN) is not required at the trigger but will be required if the TCEQ does not receive an adequate Level 1 Assessment.
- Failure to timely conduct and complete a Level 1 Assessment is a violation.
 - A Public Notice (PN) will be required if the system receives a violation.



Level 1 Assessments

Level 1 Assessment

Purpose of Assessments

- Level 1 and Level 2 assessments are conducted in order to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices
- [30 TAC§290.109(c)(3)(A)]

Level 1 Assessment

Who Performs the Level 1 Assessment?

- The Public Water System
- Licensed operators
- Other parties approved by the executive director
- [30 TAC§290.109(c)(3)(A)(i)]

Level 1 Assessment

Who Performs the Level 1 Assessment?

- Backflow prevention assembly testers and customer service inspectors licensed as specified by the Texas Administrative Code.
- Plumbing Inspectors licensed by the Texas State Board of Plumbing Examiners.
- Professional Engineers licensed by the Texas Board of Professional Engineers.

Level 1 Assessment

Who Performs the Level 1 Assessment?

- Circuit riders or technical assistance providers under contract with the executive director or other government agency as approved by the executive director.
- Utility supervisor or manager supported by various utility staff or other individuals that meet the assessment requirements as described in this paragraph.

Level 1 Assessment

Identifying Sanitary Defects

- The Revised Total Coliform Rule requires PWSs to ‘find and fix’ sanitary defects.
- Sanitary defects are: “A defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.”
- [30 TAC §290.103(35)]

Level 1 Assessment

Level 1 Assessment Form

- The Level 1 Assessment form guides a PWS through the Level 1 Assessment process in order to find any potential sources of contamination (sanitary defects).
- New Form as of May 1, 2017:

[TCEQ's Revised Total Coliform Rule Webpage](#)

Level 1 Assessment

Level 1 Assessment Form Questionnaire

- Level 1 Assessment Questionnaire:
 - Section 1 – Coliform Sample Sites
 - Section 2 – Coliform Sampling Protocol and Sample Collection
 - Section 3 – Distribution System
 - Section 4 – Water Storage and Pressure Tanks
 - Section 5 – Source
 - Section 6 – Treatment
 - Section 7 – Security and Extreme Weather Event

Level 1 Assessment

Level 1 Assessment Form

- Section 8 – Outstanding Notice of Violations and/or Enforcement Actions:
 - Outstanding Notice of Violations: meaning violations which have not been returned to compliance.
 - Outstanding Enforcement Actions: meaning any Enforcement Actions which have not been resolved.

Level 1 Assessment

Level 1 Assessment Form

- Section 8 Attachments:
 - A sample collection Standard Operating Procedure (SOP).
 - A month of distribution system disinfectant residual data leading up to the trigger event.
 - Proof of Corrective Actions (if applicable).
 - Any supporting documents (optional).

Level 1 Assessment

Level 1 Assessment Form

CARP and Signature

- Section 9 – Sanitary Defects and Corrective Actions:
 - Corrective Action Report and Plan (CARP)
- Section 10 – Signature and Contact Information:
 - The Level 1 Assessment **MUST** be signed or TCEQ cannot accept it as adequate

Level 1 Assessment

Level 1 Assessment Form

Additional Issue

- Section 11 – Additional Issue Description and Comments:
 - Describe any issues that are not sanitary defects that may have contributed to the positive samples



Corrective Actions

Corrective Actions

Corrective Action Report and Plan (CARP)

- When you have identified a sanitary defect and performed or plan to perform a corresponding Corrective Action, you document it in the Corrective Action Report and Plan (CARP).

Corrective Action Report and Plan (CARP) Example 1

Section No.	Sanitary Defect (SD) and associated Corrective Action (CA)			
1				
SD	<i>Chlorinator failed resulting in no disinfectant residuals in distribution.</i>			
CA	<i>Replaced chlorinator and flushed.</i>			
	CA Completed?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	If "No", please indicate Proposed Compliance Deadline

- For every single Corrective Action performed, fill out Corrective Action table for each.
 - Section Number
 - Sanitary Defect Description
 - Corrective Action Description
 - Completion Status/Proposed Compliance Deadline

Corrective Action Report and Plan (CARP) Example 2

Section No.	Sanitary Defect (SD) and associated Corrective Action (CA)			
4				
SD	<i>The storage tank has a small crack.</i>			
CA	<i>Getting funds to replace the storage tank.</i>			
	CA Completed?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	If "No", please indicate Proposed Compliance Deadline <i>08/01/2019</i>

- Note: If the Proposed Compliance Deadline is unreasonable such as requesting a year to complete a sample collection Standard Operating Procedure (SOP), the State can decide a more reasonable timeframe.

Corrective Actions

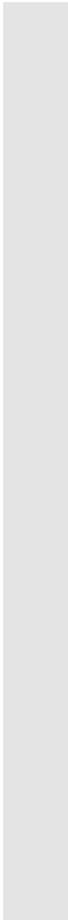
Proof of Corrective Actions

- If your system's Level 1 Assessment Form indicates that all Corrective Actions were completed, you are required to submit proof of each Corrective Action with the Level 1 Assessment Form.
- If your system has started a Corrective Action which would not be completed by the Level 1 Assessment due date, your system is required to submit proof of Corrective Action by the Proposed Compliance Deadline!

Corrective Actions

Proof of Corrective Actions Cont'd

- Adequate forms for proof of Corrective Action:
 - Pictures
 - Invoices/Receipts
 - Detailed summaries
 - Documents



Additional Issues

Additional Issue Description and Comments

Section 11 – Additional Issue Description and Comments – (Optional)	
PWSs may provide additional information in this section to further describe any issues and/or potential causes of contamination which may have contributed to any identified sanitary defects.	
1	Area-of-Impact:
	Issue Description:
2	Area-of-Impact:
	Issue Description:
3	Area-of-Impact:
	Issue Description:
4	Area-of-Impact:
	Issue Description:

Level 1 Assessment TCEQ Follow-up

Level 1 Assessment Form Submittal

- Send the Level 1 Assessment Form and attachments to the TCEQ before the 30 day compliance deadline.
 - Turn in your Assessment on time, even if the Corrective Actions are not complete!
- TCRDATA@tceq.texas.gov
- Texas Commission on Environmental Quality
RTCR Compliance Program (MC-155)
P.O. Box 13087
Austin, TX 78711-3087

Level 1 Assessment TCEQ Follow-up

Level 1 Assessment - Post Submittal

- Deficiencies:
 - The system has received a Level 1 Assessment Treatment Technique (2A) violation due to an inadequate Level 1 Assessment.
 - Each deficiency will need to be addressed and a revised version of your system's Level 1 Assessment form will need to be submitted to TCEQ in order to return to compliance.

Level 1 Assessment

Financial, Managerial, & Technical (FMT) Assistance

If you operate a water or wastewater system and would like to arrange for free financial, managerial, or technical assistance, contact our Financial, Managerial and Technical (FMT) program team:

FMT@tceq.texas.gov

<https://www.tceq.texas.gov/drinkingwater/fmt>

(512) 239-4691

Questions?



Contact Us

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