Drinking Water Advisory Work Group

Lessons Learned from Level 1 Assessments under the RTCR

Austin, Texas
October 25, 2017

Jennelle Crane
Level 1 Assessment
(What Is It?)

- **Level 1 Assessment** - an evaluation to identify the possible presence of sanitary defects, defects in the distribution system coliform monitoring practices and (when possible) the likely reason that the PWS triggered the assessment.

- **Sanitary Defects** – 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.
Level 1 Assessment
(When Do I Have To Conduct One?)

- If the PWS collects 40 or more distribution samples per month
  - More then 5% samples collected in a month are total coliform positive
- If the PWS collects fewer than 40 distribution samples per month
  - When two or more samples collected in a month are total coliform positive
- When a PWS fails to collect the required number of repeats
General Form Information

• Sign Form
• Attach Required Documentation
  • Sample Site Collection SOP

• Disinfection Records
• Read Entire Question
• Answer Each Question
• Answer N/A if Appropriate

Please note that No. 1 and 2 below are required attachments.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Attached</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Coliform sample collection Standard Operating Procedure (SOP), as referenced in Section 2.</td>
<td>□</td>
</tr>
<tr>
<td>2.</td>
<td>One month of disinfection residual data prior to the assessment trigger date.</td>
<td>□</td>
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<tr>
<td>3.</td>
<td>(Optional) Attach any additional documentation pertinent to the assessment event.</td>
<td>□</td>
</tr>
</tbody>
</table>

Describe:
Sanitary Defects

- PWSs do not receive a violation if they note a Sanitary Defect.
- PWSs will receive a violation if they do not correct the Sanitary Defect within the established timeframe.
- If a Sanitary Defect is noted but not corrected by the time the Level 1 is due - please make sure you provide a projected date that the sanitary defect will be corrected.
- Any time you note that a Sanitary Defect is corrected you will need to supply documentation.
<table>
<thead>
<tr>
<th>Section No.</th>
<th>Sanitary Defect (SD) and associated Corrective Action (CA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CA Completed?</th>
<th>Yes</th>
<th>No</th>
<th>If &quot;No&quot;, please indicate Proposed Compliance Deadline</th>
</tr>
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<tbody>
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<td></td>
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</tbody>
</table>

6  Attach Documentation (if needed)
Sanitary Defects (Continued) Examples

- Chlorinator Broken
  - Documentation – Purchase order or photo of new chlorinator installed
- Water Leak in area of sample
  - Documentation – Maintenance/service order noting the leak was fixed in accordance with AWWA standards and potentially an update to sample collection SOP to survey area for leaks
- Well casing hole and leak on well discharge pipe
  - Documentation – Maintenance/service order noting the repairs made along with photos of repairs
Sanitary Defects (Continued)

NOT Sanitary Defects

• Sampler Error (not washing hands, using same cooler for water and wastewater samples, etc.)

• Incorrect Sample bottles
Difference between SSP, MP and Sample Collection SOP

- **RTCR Sample Siting Plan** – Document where and when you collect bacteriological samples
- **Monitoring Plan** – Documents where ALL compliance samples are collected and where they are analyzed
- **Sample Collection Standard Operating Procedure** – Documents how bacteriological samples are to be taken for your specific water system.
  - Do you flame or bleach, Wash hands, Don’t rinse bottle, Etc.
Level 1 Questions and Contacts

• Questions?????
• Contacts
  • Jennelle Crane - 512-239-6118 – Jennelle.crane@tceq.texas.gov
  • Jasmine Oliveira - 512-239-6141 – Jasmine.Oliveira@tceq.texas.gov
  • Jacolyn Saldana - 512-239-4445 – Jacolyn.saldana@tceq.texas.gov
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Lessons Learned from Level 2 Assessments (L2As) under the RTCR

Austin, Texas
October 25, 2017

David Simons, P.E.
Gaps in Understanding

- Revised Total Coliform Rule (RTCR) requirements are complex
  - PWSs that trigger L2As often need help understanding the RTCR
  - Coliform Sample Siting Plans (SSPs)
  - Also NAPs and Monitoring Plan
Sanitary Defects

Examples of Sanitary Defects

- “Other” examples
  - Poor coliform sample sites
  - Failed chlorinator on TC+ well
  - Improper sanitary precautions
- “Sampler error” is uncommon!
L2A Assessor Training

• Interim training process for L2A assessors
  • TCEQ provides on-site training to a PWS’s appointed L2A assessor
  • Essentially a 1-day, crash course in how to conduct an L2A
  • Review all questions in the L2A Form
  • As time allows, visit PWS’s coliform sample sites and facilities
L2A Assessor Training

• Interim training process results
  • PWS L2A submittals – demonstrate that inexperienced L2A assessors cannot be adequately trained in one day
  • TCEQ’s onsite assistance – allows the L2A submittals to be revised by TCEQ

• Important implications for future requirements for L2A assessors (still under development)
PWS Facilities

• TCEQ’s Inventory of Facilities
  • Initial inventory and updates are often not reported correctly to TCEQ
  • Discrepancies between what needs to be assessed and what is in existing sampling plans.
  • L2As provide opportunities to clean up Inventory
Level 2 Questions