Lead & Copper Rule

Tap & WQP Monitoring

Drinking Water Standards Section
Drinking Water Assessment Team

Austin, Texas
January 15, 2019

Jason Williams and Seth Kramer
Lead and Copper Rule

Lead and Copper Tap Sample Monitoring
2019 Schedules

Schedules should be updated to our webpage by the first week in February.

January – June (Routine/Initial)
June – September (Reduced)

Texas Drinking Water Watch
https://dww2.tceq.texas.gov/DWW/
LCR Program Website

https://www.tceq.texas.gov/drinkingwater/chemicals/lead_copper/lead-copper.html

• Lead and Copper Tap Sampling
  • Instructions and Guidance
  • Required forms and paperwork
  • Accredited Laboratory Information
  • 2019 monitoring schedules
  • Link to Drinking Water Watch
LCR Tap Sampling Steps

1. Pre-sampling
2. Sampling
3. After sampling
1. Pre-Sampling

Sample Site Approval

- Lead/Copper Sample Site Selection Pool and Materials Survey Form 20467(a) and 20467(b)
  - Provide site tier classifications
  - Provide material survey

PWSs are required to review their materials survey in the course of normal operations and report changes to the TCEQ.
1. Pre-Sampling

NOTE: Over 50% of sample site selection forms require correction before approval. Site approval can take over a month to complete.

Common Errors:

1. Tier classification does not match tier definition
2. Incomplete or missing materials survey
3. No signature on form
2. Sampling

Lead and Copper Tap Sampling

- Provide “Homeowner Tap Sample Collection Procedures” to the homeowners
- Use the Lead and Copper Rule Monitoring form 20683
- Collection bottles and sample analysis are provided by an accredited laboratory

Monitoring Periods (MP)

- 1\textsuperscript{st} 6 month MP: January 1\textsuperscript{st} thru June 30\textsuperscript{th}
- 2\textsuperscript{nd} 6 month MP: July 1\textsuperscript{st} thru December 31\textsuperscript{st}
- Annual or Triennial MP: June 1\textsuperscript{st} thru September 30\textsuperscript{th}
# Lead/Copper Monitoring Form

<table>
<thead>
<tr>
<th>PWS Name:</th>
<th>Laboratory Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWS ID #: TX</td>
<td>Laboratory Address:</td>
</tr>
<tr>
<td>PWS Address:</td>
<td>TCEQ Laboratory ID #:</td>
</tr>
<tr>
<td>PWS Contact Name:</td>
<td>Laboratoy Contact Name:</td>
</tr>
<tr>
<td>PWS Contact Phone:</td>
<td>Laboratory Contact Phone #:</td>
</tr>
</tbody>
</table>

**PWS Tap Sample Checklist (v):**
- [ ] Samples filled to 1 Liter line
- [ ] Samples taken from an inside sink
- [ ] Samples collected from cold water tap(s)
- [ ] Sinks were unused for 6 hours prior to collection
- [ ] Sample containers or labels
- [ ] Samples delivered to lab within 14 days of collection

**Sample Condition on Receipt:**
- [ ] Samples delivered unpreserved (Y or N)
- [ ] Samples collected in 1 L labeled containers (Y or N)
- [ ] Samples filled to 1 L fill line (Y or N)
- [ ] Actual sample temperature
- [ ] Corrected sample temperature
- [ ] Thermometer ID #: |

I acknowledge that the information on this form is true and correct and sites selected for sampling follow the approved TCEQ Form 20687 and the PWS Monitoring Plan. Fabrication of this form or tampering with water samples is a crime punishable under state and/or federal law. (Texas Penal Code, Title 7, Chapter 17,10)

**Name of Authorized PWS Representative (Print):**

<table>
<thead>
<tr>
<th>Facility ID (e.g. 0911, RBC0001)</th>
<th>Sample Point ID (e.g. LCM001, ELCP)</th>
<th>Sample Location (Address of sample point-123 Main St, Kitchen sink)</th>
<th>Sample Focused Last Used</th>
<th>Sample Collected</th>
<th>Replacement (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Date (MMDDYY)</td>
<td>Time - 24 HR (HHMM)</td>
<td>Time - 24 HR (HHMM)</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>[ ]</td>
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<td>[ ]</td>
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<td>[ ]</td>
</tr>
</tbody>
</table>

**Original Collection Date (MMDDYY):**
- [ ] Lab Sample ID #: |
- [ ] Lab Preservation:
- [ ] Date (MMDDYY): Time - 24 HR (HHMM): Sample Rejection Code (if applicable): |

**Chain of Custody:**
- [ ] Authenticated by Signature: Date/Time: |
- [ ] Received by Courier (Signature): Date/Time: |
- [ ] Received by Lab (Signature): Date/Time: |

TCEQ-20687 (Rev. 10/2017)
## Lead/Copper Monitoring Form

- What is the Facility ID?
  - DS01
  - PBCU00#

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. LCR001, ELCR)</th>
<th>Sample Location (Address of sample point - 123 Main St, kitchen sink)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBCU00#</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lead/Copper Monitoring Form

• DS01
  - A PWS has only one distribution system. Therefore, it has one distribution Facility ID. It will always be DS01.

• PBCU00#
  - A PWS can have multiple entry points. Therefore, it can have multiple PBCU00# Facility IDs.

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. LCR001, ELCR)</th>
<th>Sample Location (Address of sample point -123 Main St, kitchen sink)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBCU00#</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lead/Copper Monitoring Form

• What is the Sample Point ID?
  • LCR00#
  • ELCR

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. LCR001, ELCR)</th>
<th>Sample Location (Address of sample point - 123 Main St, kitchen sink)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td>LCR00#</td>
<td></td>
</tr>
<tr>
<td>PBCU00#</td>
<td>ELCR</td>
<td></td>
</tr>
</tbody>
</table>
Lead/Copper Monitoring Form

- LCR00#
  - All LCR00# Sampling Point IDs are contained within the DS01 distribution Facility ID.

- ELCR
  - Whereas, an entry point has only one ELCR Sampling Point ID per Facility ID.

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. LCR001, ELCR)</th>
<th>Sample Location (Address of sample point -123 Main St, kitchen sink)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td>LCR00#</td>
<td></td>
</tr>
<tr>
<td>PBCU00#</td>
<td>ELCR</td>
<td></td>
</tr>
</tbody>
</table>
Where to find Facility and Sampling Point IDs

Select the “Sample Points” heading
## Drinking Water Watch

**Water System Sampling Points**

- Where to find Facility and Sampling Point IDs

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Facility Name</th>
<th>Fac Type Code</th>
<th>Smpl Pt ID Type Code Status</th>
<th>Location</th>
<th>Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR001 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR002 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR003 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR004 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR005 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR006 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR007 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR008 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR009 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>LCR010 - DS - A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBCU001</td>
<td>WELL 1 - HWY 84</td>
<td>SS</td>
<td>ELCR - EP - A</td>
<td></td>
<td>PBCU SAMPLE POINT</td>
</tr>
<tr>
<td>PBCU001</td>
<td>WELL 1 - HWY 84</td>
<td>SS</td>
<td>EWQP - EP - A</td>
<td></td>
<td>WQP SAMPLE POINT</td>
</tr>
<tr>
<td>PBCU002</td>
<td>GREENBRIAR</td>
<td>SS</td>
<td>EWQP - EP - A</td>
<td></td>
<td>WQP SAMPLE POINT</td>
</tr>
</tbody>
</table>
FAQs:

• Do I mark it as “Compliance” or “Non-Compliance”?
Lead/Copper Monitoring Form

• Check compliance if you want it to count towards your required samples during the monitoring period.

<table>
<thead>
<tr>
<th>Sample Type (x):</th>
<th>Compliance</th>
<th>Non-Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>

• Check non-compliance if you are sampling for any reason other than your monitoring requirements. (e.g. repeat sampling, process control, or quality control.)
Additional Things to Consider:

- Both the PWS and the lab should review the monitoring form carefully before relinquishing for analysis.
- Indicate which specific **inside tap** was used and the location it was collected (e.g. 123 Main St, kitchen sink).
- The sample point ID (LCR00#), sample location, and sample results are permanently associated together.
Sample Result Reporting

- Laboratories report results to the TCEQ using an Electronic Data Deliverable (EDD) in addition to providing analytical reports and form 20683.
  - Results must be reported to the TCEQ by the 10th day after the end on a monitoring period.
- The PWS is responsible for monitoring and reporting deadlines.
- View results on Drinking Water Watch.
  - Other Chemical Results
  - PBCU Summaries
3. After Sampling

Lead Consumer Notice

• Use Lead Consumer Notice form 20680(a) or 20680(b)
  • Deliver to consumers 30 days after receipt of sample analysis
  • Certify to the TCEQ 3 months after end of tap sample MP

Due date examples

• MP End Date + 3 Months = LCN Due Date
  • June 30 + 3 Months = Sept 30
  • Sept 30 + 3 Months = Dec 30
  • Dec 31 + 3 Months = Mar 31
Lead and Copper Rule

Water Quality Parameter (WQP) Monitoring
2019 Schedules

• Schedules are currently being updated, should be finalized in the next two weeks:

  January – June (6M1)
  January – December (Annual)

Texas Drinking Water Watch
https://dww2.tceq.texas.gov/DWW/
LCR Program Website

https://www.tceq.texas.gov/drinkingwater/chemicals/lead_copper/lead-copper.html

- Water Quality Parameter Sampling
  - WQP Monitoring Form
  - Approved Labs
  - Accredited Labs
  - WQP Monitoring Guidance
  - Accepted Analytical Methods
No updates to form 😊
Continue using 2018 version
Labs should not accept older versions without Sample Collector information

<table>
<thead>
<tr>
<th>Sample Type (✓)</th>
<th>Compliance</th>
<th>Non-compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Collector (✓)</td>
<td>Public Water System</td>
<td>Accredited Lab</td>
</tr>
<tr>
<td>Temperature and pH (Y or N):</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

| 3rd Party Contractor --> LAB ID | AL1234567 |
Distribution System Monitoring - WQPMF

- Facility ID – DS01
- Sample Point ID - DSTWQP

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. DSTWQP, EWQP)</th>
<th>Sample Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01 DSTWQP</td>
<td>ADDRESS #1</td>
<td></td>
</tr>
<tr>
<td>DS01 DSTWQP</td>
<td>ADDRESS #2</td>
<td></td>
</tr>
<tr>
<td>DS01 DSTWQP</td>
<td>ADDRESS #3</td>
<td></td>
</tr>
</tbody>
</table>
Entry Point Monitoring - WQPMF

- Facility ID – PBCU00#
- Sample Point ID - EWQP

<table>
<thead>
<tr>
<th>Facility ID (e.g. DS01, PBCU001)</th>
<th>Sample Point ID (e.g. DSTWQP, EWQP)</th>
<th>Sample Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBCU001</td>
<td>EWQP</td>
<td>ADDRESS (SEE DWW)</td>
</tr>
<tr>
<td>PBCU002</td>
<td>EWQP</td>
<td>ADDRESS (SEE DWW)</td>
</tr>
<tr>
<td>PBCU003</td>
<td>EWQP</td>
<td>ADDRESS (SEE DWW)</td>
</tr>
</tbody>
</table>
## Drinking Water Watch
Sample Point IDs

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Facility Name</th>
<th>Fac Type Code</th>
<th>Smpl Pt ID Type Code Status</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS01</td>
<td>DISTRIBUTION SYSTEM</td>
<td>DS</td>
<td>DSTWQP - DS - A</td>
<td>WQP SAMPLE POINT</td>
</tr>
<tr>
<td>PBCU001</td>
<td>JASON PS, 123 MAIN ST, WILLIAMSVILLE</td>
<td>SS</td>
<td>EWQP - EP - A</td>
<td>WQP SAMPLE POINT</td>
</tr>
</tbody>
</table>
Laboratory Approval

- Required for pH, Temperature, Alkalinity, Calcium, Conductivity, Orthophosphate and Silica
  - Check on status of existing approval
  - Complete TCEQ lab approval form 10450

https://www.tceq.texas.gov/drinkingwater/monitoring_plans/monitoring_plans.html
WQP Monitoring Guidance

- Comprehensive guidance covering:
  - How to find a laboratory
  - Where to find information on lab accreditation and approval
  - How to obtain sample bottles
  - Form requirements
  - How to collect a WQP sample
  - How to measure pH and temperature
  - How to label sample bottles
  - Shipping and reporting requirements
Laboratory Reporting

- Please continue to follow Addendum #3 of the QAPP (Revision 2 – October 26, 2018)
  - Report to TCEQ weekly
  - Follow file naming conventions (EDD/PDF)
  - WQPMF(s) should be page 1 of the submitted PDF
  - Sample condition upon receipt section of the WQPMF must be complete
  - Report pH/temperature in EDD results table if samples were collected by lab staff
Contact Information

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Jason.Williams@tceq.texas.gov

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Seth.Kramer@tceq.texas.gov