Final Recommendations of the National Drinking Water Advisory Council on the Lead and Copper Rule

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Caught in a Trap, Can’t Get Out

• Years of debate continued over the control of lead in water and the reduction of risks

• Health community is focused on paint and soil, not water

• Some water systems still have problems

• Research continues to raise more questions

• Lead is complicated

• Many lead services lines still exist
Long Term Revision of the LCR

- Stakeholder process was re-opened by EPA to get better consensus on the most difficult issues

- 2014-15 NDWAC Working Group made recommendations to National Drinking Water Advisory Council in Fall 2015

- NDWAC then made its recommendations to the EPA Administrator

- EPA will take all of 2016 to formulate a proposed LTR-LCR
The NDWAC Working Group

- EPA identified key issues of the Lead & Copper Rule (LCR) that would benefit from input from stakeholders

- LCR Working Group (LCRWG) was formed under the auspice of National Drinking Water Advisory Council (NDWAC)

- 15 working group members, with representation from:
  - State regulators
  - Local health departments
  - Drinking water utilities (small/large systems; public/private)
  - Public interest groups (community, children’s health, national NGOs)
  - NDWAC members
NDWAC WG Process

- Technical presentations on state of the science:
  - Corrosion control
  - Sample site selection
  - Lead sampling protocol
  - Copper public education
  - Lead service line replacement

- Seven, two-day, in-person meetings
Issues Discussed by NDWAC Workgroup

- Sampling Procedures
- Sample Site Selection
- Corrosion Control Treatment
- Lead Service Line Replacement
- Lead Education
- Copper Corrosion
- State Enforcement
Considerations

- The LCR should remain a treatment technique rule

- The issues associated with lead and copper are different

- CCT is complex, dynamic, and varies with system conditions. Attention to unintended consequences is important.

- Attention to what systems can implement and States are able to oversee and enforce is important.

- PWS and state resources should be focused on actions that achieve the greatest health protection.
Public Education is a Cornerstone

Lead Control Program
- Provide Public Education Information and Consumer Confidence Report
  - Maintain Water Quality Monitoring
    - Corrosion Control Treatment needed?
      - Yes:
        - Water Quality Parameter Monitoring
        - Change Treatment or Source
      - No:
        - Do Lead Service Lines Exist?
          - Yes:
            - Lead Service Line Replacement Program
          - No:
            - Maintain Water Quality Conditions

Copper Control Program
- Provide Information in Consumer Confidence Report
  - Is water corrosive?
    - No:
      - Change such that water is not corrosive
    - Yes:
      - Public Education
        - Maintain Water Quality Conditions
        - Change Treatment or Source
Corrosion Control Treatment

• Can we determine when CCT is “optimized”?
• Does WQP monitoring reflect the whole distribution system?
• Are we monitoring all the right WQ parameters?
• Are States being strict enough on WQP limits?
Results from LSLs are Difficult to Interpret

• Dissolved Lead
  – We have theoretical and practical experience with corrosion control

• Particulate Lead
  – Almost no theoretical or practical experience

• We don’t know if it is possible to manage particulate lead release using centralized corrosion control treatment
Where are the LSLs?

- Is there an inventory of service lines?
- How can lead service lines be located?
- Are there opportunities to engage real estate and home inspectors?
- How can the public gain access to where lead service lines exist in their communities?
- Who owns the LSLs?
Re-evaluate when changes occur

**Lead Control Program**
- Provide Public Education Information and Consumer Confidence Report
  - Maintain Water Quality Monitoring
    - Corrosion Control Treatment needed?
      - Yes: Water Quality Parameter Monitoring
      - No: Lead Service Line Replacement Program
        - Do Lead Service Lines Exist?
          - No: Maintain Water Quality Conditions
          - Yes: Contact Health Agency and Report to Customer
            - HAL Exceeded?
              - Yes: Report to Customer and to State and Evaluate CCT and other Conditions
              - No: Report to Customer
                - SAL Exceeded?
                  - Yes: Change such that water is not corrosive
                  - No: Maintain Water Quality Conditions
        - Customer Requested Tap Sampling
          - Yes: Change Treatment or Source
          - No: Maintain Water Quality Conditions

**Copper Control Program**
- Provide Information in Consumer Confidence Report
  - Is water corrosive?
    - No: Maintain Water Quality Conditions
    - Yes: Public Education
      - Change such that water is not corrosive
      - Yes: Change Treatment or Source
Sampling: Continuous & Customer Initiated

**Lead Control Program**

- Provide Public Education Information and Consumer Confidence Report
- Maintain Water Quality Monitoring

**Copper Control Program**

- Provide Information in Consumer Confidence Report

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**Do Lead Service Lines Exist?**

- **Yes**
  - Water Quality Parameter Monitoring
  - **Yes**
    - Corrosion Control Treatment needed?
      - **Yes**
        - Change such that water is not corrosive
      - **No**
        - Maintain Water Quality Conditions
  - **No**
    - Lead Service Line Replacement Program

- **No**
  - Customer Requested Tap Sampling
    - HAL Exceeded?
      - **Yes**
        - Contact Health Agency and Report to Customer
      - **No**
        - Report to Customer and to State and Evaluate CCT and other Conditions
    - SAL Exceeded?
      - **Yes**
        - Report to Customer and to State and Evaluate CCT and other Conditions
      - **No**
        - Maintain Water Quality Conditions

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**Is water corrosive?**

- **Yes**
  - Public Education
  - Change such that water is not corrosive
- **No**
Separate Copper Requirements

Lead Control Program

- Provide Public Education Information and Consumer Confidence Report
- Maintain Water Quality Monitoring
- Corrosion Control Treatment needed?
  - Yes
    - Water Quality Parameter Monitoring
    - Change Treatment or Source
  - No
    - Do Lead Service Lines Exist?
      - Yes
        - Lead Service Line Replacement Program
      - No
        - Maintain Water Quality Conditions

Copper Control Program

- Is water aggressive?
  - No
    - Public Education
  - Yes
    - Change such that water is not corrosive
      - Yes
        - Maintain Water Quality Conditions
      - No
        - Change Treatment or Source

- Customer Requested Tap Sampling
  - HAL Exceeded?
    - Yes
      - Report to Customer and to State and Evaluate CCT and other Conditions
    - No
      - Report to Customer
  - SAL Exceeded?
    - Yes
      - Report to Customer and to State
    - No
      - Change Treatment or Source

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A Conceptual Approach to Copper...

• Categorize systems by finished water aggressiveness (alkalinity, pH...)

• Monitor distribution system water quality

• Targeted outreach if water is aggressive

• Sample only if water is aggressive

• Apply corrosion control when needed
THE CURRENT LCR WOULD KEEP US RUNNING IN A CIRCLE, FOREVER!

The revised LCR can set a long-term goal to get us to a place where such a Rule may no longer be needed!
Revisions to LCR are important but not sufficient

- EPA must play a leadership role in a national effort with other partners to reduce lead in drinking water that includes, but is not limited to:
  - Working across all offices and with other federal agencies on integrated approach to action and education (*HUD, CDC*)
  - State and local policies to support LSLR and to assist customers (*e.g. inspection/disclosure on sale of homes, building code requirements upon substantial renovation, priority in SRF funding*)
  - Enhanced cooperation among state and local health departments on childhood lead poisoning, screening and prevention that includes a focus on drinking water as a source
Perhaps more importantly....

The NDWAC’s recommendations to revise the LCR address:

• All the concerns about how and where to sample
• The greatest unresolved risk; LSLs
• The need for much better public outreach
• The difference between lead and copper
• The need to help customers take appropriate action
And the NDWAC recommendations already addressed the various concerns that were raised in the many recent news reports!