




RTCR

One Year In

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 - Coliform Rule Manager
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The 411

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- Share ideas
 - Stimulate thought process
 - Shake up the routine
 - Stir up the ooze

 - Status Quos are made to be broken
-- Ray Davis

The Goal



Assessments

- Level 1
 - 40 Systems
 - 2 due to late repeats
- Level 2
 - 12 Assessments
 - 6 Systems

Seasonal Systems


- Seasonal Start-up
 - BSDW – 23
 - SNHD – 6
 - WCHD – 4

The Numbers


- One system inactivated
- One system did not serve water
- One system increased to year-round operation
- 3 violations for failing to complete start-up



The Seasonal Skinny

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- Advance thought and preparation
 - Understand approved Start-up SOP
 - Where to take samples
 - Disinfection
 - Shutdown procedure
 - Time allowed for procedures and review

What worked?

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- Creating the start-up procedure and sending in the checklist at the same time.
 - Starting to serve before approval given
 - Calling on Friday for opening on Monday
 - “What do you want me to do?”
 - “Can I have an extension?”
 - Really?

What didn't work?

- Take a few minutes to review SOP and decide if anything should be done differently.
- Give BSDW/SNHD/WCHD time to review and approve checklist.
- Include coliform results with checklist.
- Initial samples NOT compliance monitoring
- Allow time for compliance sampling the month of opening.

Always think ahead.


2017

- Level of Effort
 - Sampling error
 - Weather conditions


“I'm a greater believer in luck, and I find the harder I work the more I have of it”

— Thomas Jefferson


The Assessments

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- Are you sure?
 - Did you
 - Glance?
 - Leave your office?
 - Scrutinize?
 - Get Dirty?

No Problems?

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- “No problem found” was not common
 - When it was found, seemed to be true


In fact

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- Regulation allows rejecting the L1 Assessment Request additional information
 - Regulator may request further investigation
New 30-day clock
 - Investigatory samples may be needed

Going Forward


- Sampling Error
 - Protocol
 - Location
- Maintenance
 - Disinfect after modifications
 - Treatment operations
- Old pressure tank
- Cross connection
- Water age

Some Level 1 Defects

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- Question Staff
 - Review activities, maintenance, SOPs, schedules

 - Number ONE: Little or NO disinfection following maintenance 8
 - Number TWO: Treatment system (changes, maintenance, ignored) 5

Thoroughness is Key

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- Several a combination of One and Two
 - Chlorination needed or not maintained (4)
 - Sampling location or protocol (3)
 - Cross connection (1)


Other findings

- Maintenance (11)
 - Disinfect after modifications
 - Treatment operations
- All triggered by multiple coliform events
- 2 Systems – Multiple Level 2s
 - Ongoing treatment issues
 - Unsafe well and poor communication

Some Level 2 Defects

- Transient Non-Community (8)
 - Maintenance
 - Lack of understanding
- Community (3)
 - Poor well construction
 - Lack of funds
 - Lack of communication

System Characteristics


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- Training
 - Engineering
 - Chlorination
 - Treatment Maintenance/Replacement

Solutions


- Flow direction or pressure changes
- Water age AND pipe sediments
- Potholing and Pressure testing



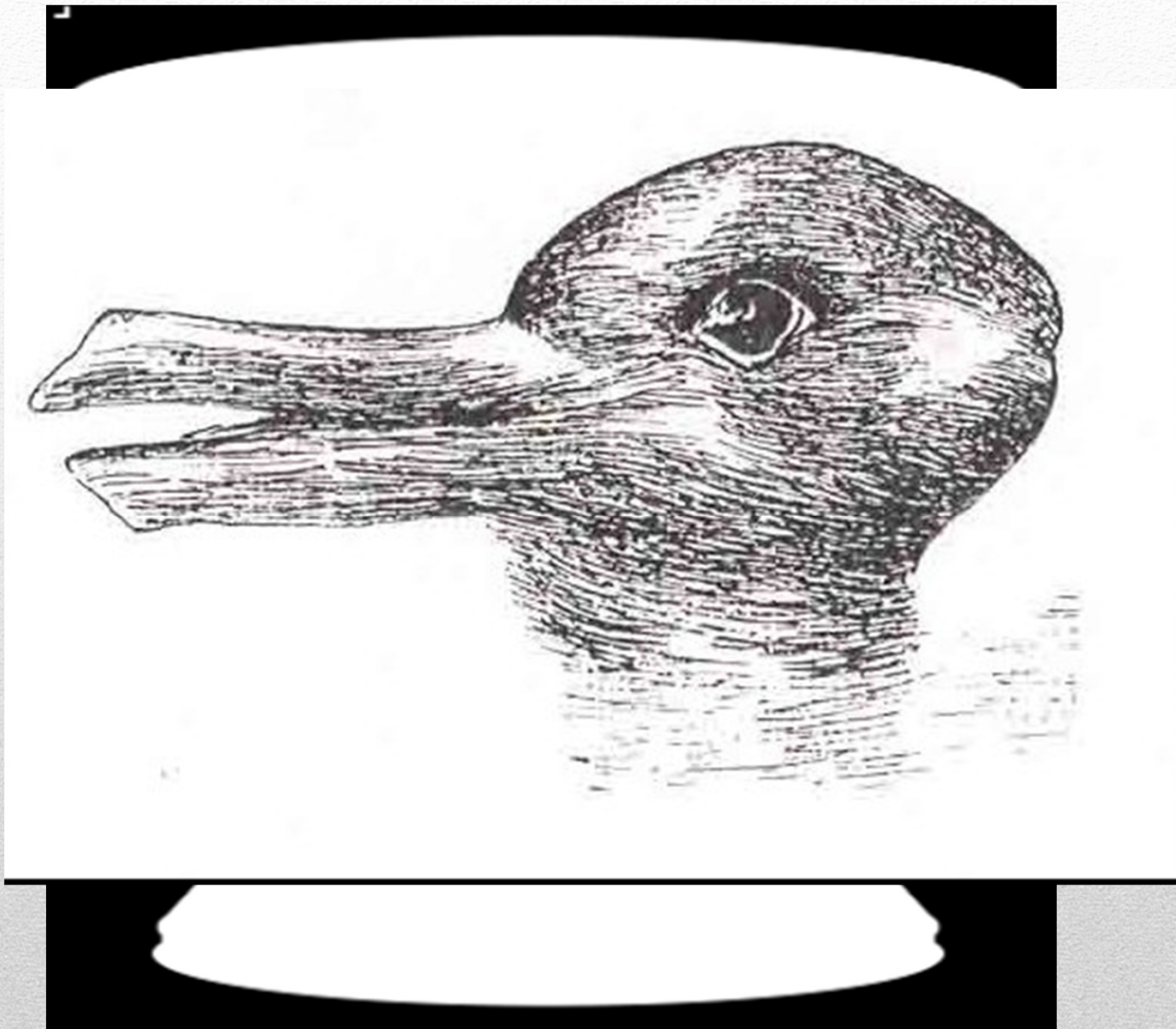
Experience

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- Is your system coliformy?
 - Contaminating factors
 - Your experience
 - Your support system

Your Turn

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- Assessments take time
 - Thorough investigation
 - Investigative samples
 - Look Again
For the First Time

The Plan



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Call Me
