

Continuing Education for Water Operators



Mariana Islands
Water Operator Association

February 6, 2013
Pacific Islands Club, Saipan

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Today's Agenda

- About Continuing Education
- Current Events
 - Recent Investigation about smelly water
 - Well investigation IF-28
 - Revised Total Coliform Rule
- Main Events: Lead and Copper Rule
- Main Events: Corrosion Control for new plumbing
- Association Business

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Continuing Education for Water Operators



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Is THIS training required?

➤ NO

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Why have continuing education?

- DEQ Regulations require certified operators to have 10 contact hours of continuing education per year (30 contact hours in 3 years) to maintain certification.
- DEQ is not required to offer training (and no longer offers training – no \$\$\$)
- Where would operators get training?

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Other training options

- Professional training provided by your employer (safety, pump maintenance, lab procedures, etc.)
- College classes
- Conferences or workshops by professional organizations or agencies
- Correspondence courses
- On-line opportunities

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NOT continuing education

- Meetings with DEQ or EPA
- Surveys or inspections by DEQ or EPA
- Reading journal articles or textbooks by yourself
- Googling water operator stuff on the internet

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When should training be offered?

- DEQ surveyed all certified operators
- Results
 - One 3 hour session every 3 months
 - In morning
 - On a Wednesday
- First session September 6, 2006

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2006 – 2008 (DEQ)

- September 6, 2006: Chlorination
- November 8, 2006: Using a Pump Curve
- February 7, 2007: Cross Connection
- May 9, 2007: Regulations - CCR, PNR
- August 8, 2007: Sizing Pressure Tanks
- November 26, 2007: PWS workshop
- February 20, 2008: Fluoridation
- May 2008: Process Controls (Robert Brokate)
- August 2008: Slow Sand Filters
- November 12, 2008: TCR and Control Valves

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2009 MIWOA

- March 25, 2009: Security and Filters
- May 13, 2009: Alt. Energy, CCR, Compliance
- August 5, 2009: Geology of Saipan, GWR
- October 9, 2009: GWR Workshop
- December 2, 2009: Valves, Spills, Walkerton

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2010 MIWOA

- February 3, 2010: Safety, Haz Materials
- May 5, 2010: BEH & DEQ, Cross Connections
- August 11, 2010: Waste Water Collection/Treatment
- November 3, 2010: Response to disease outbreak

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2011 MIWOA

- February 2011: Chemical Injection Pumps (HRWA)
- May 2011: Radiation, Radionuclide Rule
- July 2011: Utility Policies & Procedures; Standard Operating Procedures (HRWA)
- November 2011: Leak detection

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2012 MIWOA

- February 2012: Bottled Water; Reverse Osmosis; Bottle Sanitation
- May 2, 2012: Inspecting Tanks, Water Meters
- August 8, 2012: Wastewater membrane filtration (Lau Lau Golf Hotel)
- November 2012: Metering and measuring flow

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2013 MIWOA

- February: Corrosion Control for Pb & Cu
- May:??
- August: wastewater
- November: ??
- Sometime in 2013 – Backflow Assembly Tester Training (by Texas A&M Engineering Extension Service)

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THIS TRAINING IS FOR YOU!

We'll do what we can to make it what YOU want it to be!

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Suggestions for training

- Possible topics for upcoming sessions:
 - Backflow prevention device testing
 - Rainwater
 - Local Water System
 - How Reverse Osmosis Works
 - Energy efficiency
 - Storm water and erosion control
 - Introduction to waste water treatment
 - Field trip
 - Cleaning and handling bottles
 - Leak detection

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Announcements

- Certificates from the last 7 classes are posted on the website (May 2011 – November 2013)
- Later this month the website will look different – but still have the same information

www.MarianasOperators.org

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CE Credit

- Make sure to sign-in and pay to get credit for class
- Certificates made from sign in list (and receipt book).
- Name – as it appears on sign-in sheet
- Note e-mail address change on sign-in sheet

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Current Events

Smelly Water Investigation

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Investigation

- In February 2013 DEQ received a complaint from a CUC customer on Navy Hill
- Water had a petroleum smell

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Investigation

- DEQ not prepared to collect and analyze for VOCs

BUT

- DEQ has other sampling equipment

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Investigation

- Site remediation branch (SAR)
- Responsible for site assessment and clean-up
 - Ray Masga
 - Yubert Alepuyo

SEE THEIR SEPARATE POWERPOINT

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Current Events

Well Investigation IF-28

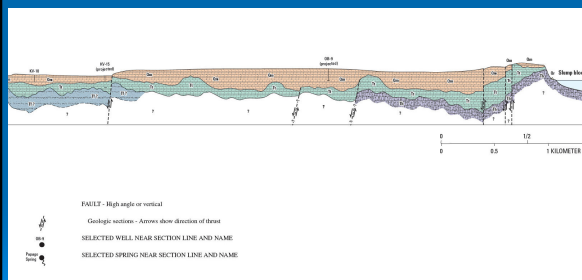
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Location of IF-28

- Go to ArcGISOnline
- Geologic formations around IF-28

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Geologic Cross Section



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Downhole Camera



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Downhole Camera



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Downhole Camera



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IF-4 Video

➤ [Click here](#)

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IF-28 Video

➤ [Click here](#)

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Current Events

Revised Total Coliform Rule

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Revised Total Coliform Rule

- 12/20/2012 Press Release
- US EPA had updated the TCR
- Effective April 1, 2016

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TCR

- Purpose: protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbial contamination.
- Only microbial rule that applies to ALL PWS

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TCR Basics

- MCL for Total Coliform and Fecal Coliform
- Frequency, timing, number of samples based on population
- Public Notification required if monitoring results indicate the need

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Revised Rule

- Purpose: greater public health protection than the TCR.
- Changes:
 - Requires PWS vulnerable to contamination to identify and fix problems
 - No MCL for Total Coliform
 - MCL for E. Coli

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Changes - Monitoring

- Basic monitoring frequencies same, but:
 - Link to water quality and system performance
 - Increased monitoring for high-risk small systems with bad compliance history
 - New requirements for seasonal systems
 - Establishes criteria for well-operated systems to qualify for reduced monitoring (CNMI?)

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Changes - MCL

- Eliminated MCLG / MCL for Total Coliform
- MCLG for E. Coli = 0
- MCL acute violation for E. Coli

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Assessment

- Total Coliform detected > (old MCL)
- Assess system for sanitary defects and make corrections.
- If E. Coli detected -> assessment and corrections required

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Changes – Public Notification

- No more monthly PN based on presence of Total Coliform!!!
- PN required when E. Coli MCL violation
- Failure to conduct assessment and corrective action

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Timeline

- Federal register publication – soon?
- CFR publication – July 2013
- CNMI should adopt the regs by Apr 2015
- DEQ workshop on RTRC sometime in early 2016 (or late 2015)

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Break - 10 minutes



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Main Event

Lead and Copper Rule Refresher

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Video

- [Operator Training Guide on the Lead and Copper Regulations \(1994\)](#)

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Main Event

Corrosion Control for New Plumbing (webcast)

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Corrosion Control

- <http://www.youtube.com/watch?v=iZjspMwC1oE>

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End Training

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Association Business

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May Annual Meeting

- Next CEU training – May 2013
- Annual election of Board members (2)
 - Take nominations now (Feb)
 - Derek up for re-election
 - Bernard up for re-election

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Board Member Terms

- Chair: Derek Chambers – May 2013
- Vice chair: Bernard Keremius – May 2013
- Secretary: Mariano Iglecias – May 2014
- Treas: Cecilio Raiukiulipiy – May 2015

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