



# Delivering Water Quality Solutions

Spring Conference

May 18, 2017





## Moderator: Darrin Polhemus, Deputy Director, Division of Drinking Water, SWRCB

### Panelists:

- Dawn White, Golden State Water Company
- Francois Rodigari, San Jose Water Company
- David Van, San Gabriel Valley Water
- Sophie James, California Water Service Company
- Adam Ly, Liberty Utilities
- Tim Miller, California American Water Company





# Status of School Lead Sampling Program

- January 17, 2017 DDW issued a press release and began issuing permit amendments to water systems
- Requires systems to sample up to five locations for lead at drinking water locations at schools when requested by a school official
- January 30, 2017 Department of Education issued a press release about the school testing program





## San Jose Water Company

- 319 K-12 schools in SJWC service area
- 45 schools have requested sampling (5 public school districts, 1 charter school organization, and 2 private schools)
- 133 samples have been collected
- 83 sample results have been received
- 2 samples above DLR (2.4%)
- 0 samples above AL



## SJWC - Outreach Efforts

- SJWC included in outreach by City of San Jose Mayor's Schools and City Collaborative meeting
- Individual emails sent in early April to each school superintendent, principal, or other official introducing program and encouraging participation
- Description of Lead Sampling in Schools program included in SJWC's annual Consumer Confidence Report, published on May 1, 2017





# SJWC - Resources Needs

- Initially, on average ~15 person-hours per school, due to initial documentation, database, and sampling setup requirements
- On-going labor requirement estimate: ~10 hours per school (does not include actions that would be required for results > AL):
  - Communication
  - Sampling plan
  - Laboratory coordination
  - Reporting
  - Record keeping



# Summary of Testing

	# of Schools	# of Requests	# of Samples	Detections (>5 ppb)	Over Action Level (15 ppb)
SJWC	319	43	133	2	0
GSWC	500	54	214	5	2
Liberty	52	10	50	0	0
SGVW	145	4	6	Pending	Pending
Cal Am	387	58	100	Pending	Pending
Cal Water	735	35	40	1	0





# California American Water – Lead in Schools Testing

- All school districts in San Diego County service area have requested testing for all campuses after media reports that some San Diego schools exceeded the Action Level
- All Monterey Peninsula schools requested testing after a UC Santa Cruz professor reported results over Action Level though the sample was invalid







# Senate Bill 1398

- Related to Lead Water Pipes and Lines
- Signed by the Governor on September 27, 2016
- Intent is to remove all lead from public water systems by working to ensure that the state is aware of what systems contain lead pipes
- By July 2018 compile an inventory of known lead service lines and identify areas that may have lead service lines
- Provide a timeline for replacement of known lead service lines
- By July 2020 determine existence or absence of lead service lines and provide a timeline for replacement





# Senate Bill 1398 Implementation Issues

- “User Service Line” – “the pipe, tubing, and fittings connecting a water main to an individual water meter or service connection”
  - Includes goosenecks?
  - Customer side of the meter?
- What level of verification is required to confirm or deny the presence of lead?
- Will examination of unknown service lines at the angle stop suffice to determine if lead service line exists?
- What is the prescribed testing protocol to determine if a service line is lead-free?
- Are copper pipes with less than 8% lead installed prior to 2011 grandfathered as lead free?





## Senate Bill 1398 Implementation Issues, cont.

- What documentation is required to meet the July 1, 2018 deadline? (Water system generated list of connections and type of material, or State provided template)
- Can the state grant an extension to the July 1, 2018 deadline if necessary?
- Does SB 1398 pertain to just service lines made of mostly lead (defined under T22 §64671.35), service lines containing >0.25% lead (copper, galvanized), or both?





# Status of the Contemplated Revisions to the Total Coliform Rule

- EPA's RTCR became effective April 1, 2016
- The State Water Resources Control Board is in the process of promulgating and adopting the CA RTCR
- Draft proposed RTCR February 3, 2017
- 6 Public Workshops between February 23, 2017 and March 30, 2017
- Informal comments can be sent to [RTCR@waterboards.ca.gov](mailto:RTCR@waterboards.ca.gov)
- It is not known when the final proposed regulation will be released and enter the formal comment period



# RTCR – Enumeration of Coliforms

- EPA's TCR discontinued enumeration and adopted a presence-absence format
- Christian, R. and W. Pipes. 1983. Frequency distribution of coliforms in water distribution systems. Appl. Environ. Microbiol. 45:603-609
- “The sample arithmetic mean is not a good indicator of the true arithmetic mean of coliforms in water distribution systems.”
- Coliforms are not randomly or evenly distributed in the distribution system





# RTCR – Significant Rise

- CWA supports that DDW needs to have authority to direct an assessment and/or public notice when there is an indication of public health risk
- EPA’s RTCR removed the MCL and PN provision for total coliforms shifting to a “find and fix” approach
- MCL based on *E.coli* remains
- CA’s draft proposal includes total coliform conditions that can lead to a significant rise status which can require a boil order where there is no evidence of public health risk
- Recommending that significant rise status triggers an assessment rather than public notification
- Recommending that public notice is triggered if the *E. coli* MCL is violated or serious sanitary defect is discovered that cannot be immediately corrected





## Superior Court Ruling Regarding the Hexavalent Chromium MCL

- California Manufacturers and Technology Association and Solano County Taxpayers Association v. State Water Resources Control Board
- Case challenges SWRCB's promulgation of an MCL (10 ppb) for hexavalent chromium
- Petitioner claimed that the Department failed to comply with substantive and procedural requirements imposed by the SDWA and the APA when it set the MCL
- "...this case is remanded to the Department with orders to withdraw the current MCL and establish a new MCL."
- "the Department must ...consider the economic feasibility of compliance, paying particular attention to small water systems and their users, and to set the MCL as close as economically feasible to the PHG of 0.02 ppb."



# Status of Compliance Plans with 1,2,3-TCP

- 1,2,3-TCP is a manmade chlorinated hydrocarbon. It has been used as a cleaning and degreasing solvent and also is associated with pesticide products
- Public workshops July 2016
- Notice of proposed rulemaking – formal comments due April 21, 2017
- Proposed MCL of 5 ppt (parts per trillion)
- CWA's comments focused on the compliance timeline







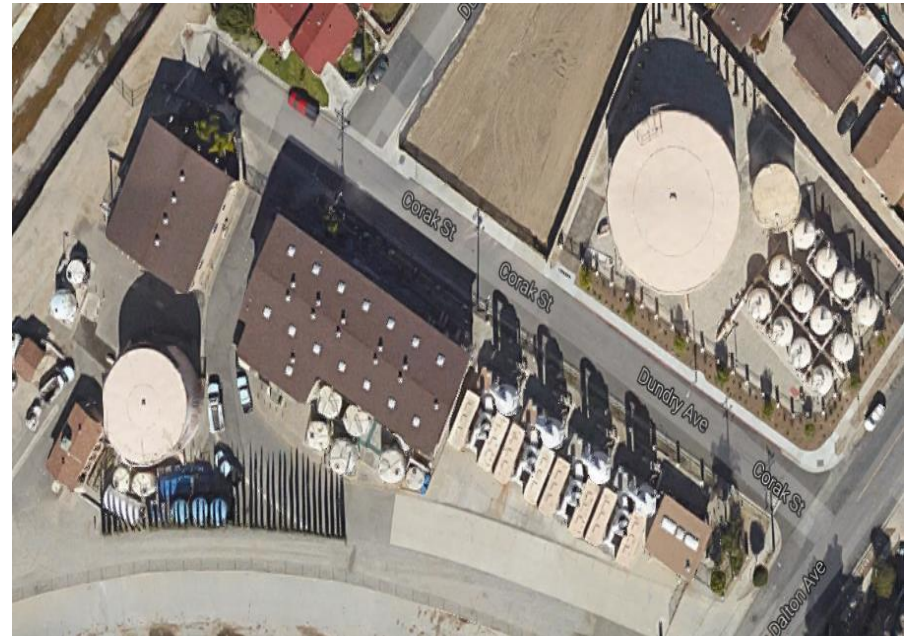
# San Gabriel Valley Water Company - South El Monte Operable Unit

- 1,2,3-TCP CONC. AT HEAD OF TS:
  - NON-DETECT – 2.6 PPT
- 1,2,3-TCP CONC. AT RESERVOIR:
  - NON-DETECT



# San Gabriel Valley Water Company - Baldwin Park Operable Unit

- 1,2,3-TCP CONC. AT WELL:
  - NON-DETECT – 2.6 PPT
- 1,2,3-TCP CONC. AT HEAD OF TS.:
  - NON-DETECT
- 1,2,3-TCP CONC. AT RESERVOIR:
  - NON-DETECT



# California Water Service Approach to Compliance

- Background
  - Began testing in 1999 as required by CA UCMR 1
  - Continued quarterly monitoring of sources that tested positive for TCP
  - Implemented routine testing of all sources in 2007 (once every 3 yrs)
  - Obtained lab certification for low level monitoring in 2014



# CWS Approach to Compliance

- Goal is to achieve 100% compliance
- Install GAC treatment at 38 sites
  - Bakersfield – 25 wells
  - Visalia – 11 wells
  - Selma – 2 wells



# Phased Approach

- Schedule GAC installation in 3 phases
  - Phase I : Install treatment on wells with concentrations  $\geq 20$  ppt
    - Complete installation by Q1 2018
  - Phase II: Install treatment on wells with concentrations between 5 ppt – 20 ppt (1-4X MCL)
    - Complete installation by Q2 2018
  - Phase III: Install treatment on wells with concentrations  $\leq 5$  ppt
    - Complete installation by Q3 2018



## Current Status

- Selected vendor for GAC vessels contract
- Awarded construction contract
- Estimated Budget: \$Millions
  - 38 specific capital projects – each well site
- Established a memorandum account to track cost
- Pending lawsuit against responsible parties



# Water Quality Enforcement Policy

- Adopted April 4, 2017
- Applies to Statewide General Permit for PWS with 1000 or more connection that have not filed a “notice of non-applicability”.
- Policy intent is to prevent “a non-compliant member of the regulated public begins to realize a competitive economic advantage over compliant members of the regulated public”
- Fines can be levied for failure to notify or to report. Timely and accurate notifications and reports are critical to ensuring compliance.
- Regional Boards typically consult with Office of Enforcement on implementation of Enforcement Policy.



# Special Considerations for PWS

- Potable water, because it contains disinfectants, would be considered as causing major harm, regardless of volume of discharge.
- There does not need to be any evidence of actual harm for a violation to be accessed.
- Fines have been increased 30-70% depending on enforcement calculation.
- Example: A pipe break resulting in discharge of 900,000 gallons of water with no fish kill but having potential for harm. Prior fine was \$567,000 vs. \$750,00.
- SWRCB considers pipe being old to indicate culpability.







# Discussion of Water IOUs Addressing Need to Have Access to Efficient CEQA Process





# CEQA Review for IOU Drinking Water Permit Amendments

<b>CDPH CEQA Process</b>	<b>DDW Transitional Process</b>	<b>DDW Current Process</b>
<p>CDPH Environmental Review Unit conducted CEQA analysis</p> <p>Sanitary Engineers reviewed for SDWA compliance</p> <p>ERU did not get transferred to DDW</p>	<p>Division of Financial Assistance conducted CEQA analysis</p> <p>Sanitary Engineers reviewed for SDWA compliance</p> <p>DFA staff now prioritize SRF and Prop 1 Applications; no capacity to timely review other applications; some District Engineers provide CEQA lead functions</p>	<p>Environmental Analysts or District Engineers conduct CEQA analysis</p> <p>Sanitary Engineers reviewed for SDWA compliance</p> <p>District Engineers may not have expertise or resources to serve as CEQA lead for IOUs</p>



# CEQA Review for IOU Drinking Water Permit Amendments

CEQA Exempt?	Initial Study Required?	EIR?	Path Forward
<p>GAC to control VOCs at existing well</p> <p>Drilling wells with capacity that is offset by old well destructions</p> <p>Replacement of tanks</p>	<p>IX treatment with off-site brine disposal at existing facility</p> <p>New, larger reservoir at an existing location</p> <p>Replacing old well with new well at same site (redrilling)</p>	<p>????</p>	<p>IOUs to fund two environmental analyst positions at DDW. Positions will be dedicated to process CEQA for IOUs.</p>



# Discussion of Implementation Time Frame for Future Drinking Water Quality Standards



# Implementation – Inorganic Chemicals

- Except nitrate, nitrite, perchlorate
- Sample once per compliance period (3 years) (surface water annually, Q if upward trend)
- If level exceeds MCL:
  - Notify DDW and resample
  - As long as  $<10X$  the MCL, begin Q monitoring
  - Compliance based on Running Annual Average



# Implementation – Organic Chemicals

- Initial sampling – four Q samples
- Initiate January after MCL is effective
- If detected – collect confirmation samples
  - For systems with >3,300 persons, sample monthly for 6 months
  - For systems with <3,300 persons, sample Q for one year
- Compliance based on RAA





Thank you!

