

OPERATIONS AND WATER QUALITY COMMITTEE MEETING
SUMMARY MINUTES
Wednesday, June 5, 2019
4:15 PM

ATTENDANCE

Directors: John Weed (Chair), Judy Huang 
Staff: Robert Shaver, Cynthia Ha (Presenter), Cris Pena, Mike Wickham, Robert Ells

DISCUSSION TOPIC

1. 2019 Public Health Goals (PHGs) Report: Cynthia Ha, Environmental Engineer, shared a draft report entitled "Alameda County Water District Report on Water Quality Relative to Public Health Goals 2016-2018," which is triennial requirement of the California Health and Safety Code. This report informs consumers of constituents in their drinking water that have exceeded PHGs or Maximum Contaminant Level Goals (MCLGs) during the calendar years of 2016, 2017 and 2018. The report provides the public with water quality information beyond the annual Consumer Confidence Report (CCR) and helps consumers understand the health risks associated with constituents that exceed the PHGs or MCLGs, as well as the best available technology (BAT) and cost estimate of achieving higher water quality over and above regulatory requirements. PHGs and MCLGs are non-enforceable, health based goals set by the Office of Environmental Health Hazard Assessment (OEHHA) and the US Environmental Protection Agency (EPA), respectively.

Ms. Ha indicated that two PHGs and one MCLG were exceeded during the 3-year reporting period. These constituents include lead, which was monitored at customer taps, bromate and *Escherichia Coli* (*E. coli*). Lead was not detected in the water supplied by ACWD and no known lead service lines exist within the service area. However, lead is introduced to drinking water primarily through internal corrosion of household water plumbing. Based on the result of Lead and Copper Rule monitoring in 2018, the 90 percentile value of lead is 5.7 µg/L, which is below the Action Level of 15 µg/L but above the PHG of 0.2 µg/L.

As required, the report discusses the BAT for lead control, which is optimal corrosion control. ACWD has implemented the optimal corrosion control program since 1999. Calcium carbonate precipitation potential (CCPP) is targeted above zero by adjusting pH in finished water at each of ACWD's treatment facilities. ACWD achieves optimal corrosion control and met the Action Levels for lead. Additionally, ACWD has implemented other programs to help customers to reduce levels of lead at their taps, which include: (1) Water meter replacement program: only "lead free" meters are installed in all new construction and to replace old water meters; (2) Public education program: ACWD continues to inform customers about the health effects of lead through the ACWD website and publications. Additionally, ACWD has been complying with the State regulations to help reducing lead levels at customer taps; these activities include (1) Provide assistance to eligible school on testing lead in water per the requirements of Water Supply Permit Amendment and California Assembly Bill 746; (2) Identify areas of unknown materials of service lines under

Senate Bill 1398 and Senate Bill 427. Director Weed inquired if Ohlone College has been tested for lead in drinking water as a result of either of the before mentioned programs. Staff responded that only K-12th grade schools are eligible for lead testing.

Ms. Ha explained that bromate is a disinfection byproduct of ozonation and is unique to Water Treatment Plant No. 2 (WTP2) because it is ACWD's only treatment plant with an ozonation process. ACWD is in full compliance with the Maximum Contaminant Level (MCL) of 10 µg/L, but above the PHG of 0.1 µg/L. Pre-chloramination, which has been implemented at WTP2 since 2011, is the key bromate control strategy used at WTP2. Bromate was not detectable in 5 out of 12 quarters between 2016 and 2018. Only low levels of bromate (1.04 – 2.2 µg/L) were detected due to elevated bromide in the source water.

The State Division of Drinking Water (DDW) and the US Environmental Protection Agency consider "control of ozone treatment process to reduce production of bromate" as the BAT for bromate control. ACWD has implemented several strategies for bromate control, including pH suppression and chloramination ahead of ozonation. These control strategies have demonstrated their ability to treat very challenging source water during the drought and to maintain bromate concentrations well below the MCL. ACWD will continue to employ these strategies to reduce the bromate levels at WTP2.

Ms. Ha discussed that ACWD has been complying with both state Total Coliform Rule (TCR) and federal revised Total Coliform Rule (RTCR) since April, 2016. Each month, over 200 samples are collected monthly in the tri-cities for biological activity monitoring. The MCLG for *E. coli* is zero positive samples. ACWD detected one *E. coli*- positive sample in February and June 2017. Ms. Ha reported that all follow up samples including repeat samples, up and down stream samples and ground water source samples collected following the positive events resulted in *E. coli*- negative results. Investigation showed that there were no treatment upsets, no work had been performed in the immediate area of the sample location, and the presence of healthy chlorine residual in the distribution system. While *E. coli* was tested positive twice in 2017, ACWD is not in violation of either the state or federal MCLs.

The DDW has specified that the one of the BATs for *E. coli* is to maintain an effective disinfectant residual in the water distribution system. ACWD utilizes chloramine as the residual disinfectant to limit disinfection byproducts (DBP) formation and maintain effective residual in the distribution system. Additionally, ACWD implements other BATs for *E. coli* control including maintaining a water main cleaning program, a reservoir cleaning program, a surveillance program and a cross-connection control program. To ensure representative bacteriological samples are collected in the distribution system, ACWD regularly provides refresher training to staff that collect bacteriological samples, and sampling stations are routinely inspected. Director Weed indicated that areas of concern and vulnerability are locations where the sanitary sewer crosses over the water main and suggested staff to identify those locations. Director Huang suggested including FAQs and hot links in the 2019 PHG report to clarify the definition of PHG, MCLG and MCL.

In accordance with requirements associated with the issuance of the PHG report, the ACWD Board is to accept and respond to any public comments concerning the report in a public hearing. The hearing is scheduled to be on the agenda for the August 8th, 2019 Board meeting.

2. Public Comments: There were no public comments.

RECOMMENDATIONS

Topics discussed by the Committee were informational only and no recommendations were made.