



Agenda Report

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File #: 19-0952

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**AGENDA REPORT  
REQUEST FOR CITY COUNCIL AND  
CORONA UTILITY AUTHORITY ACTION**

DATE: 11/06/2019

TO: Honorable Mayor and City Council Members  
Honorable President and Board Members

FROM: Department of Water and Power

**SUBJECT:**

Public Hearing for City Council and Corona Utility Authority consideration to approve the Report on Water Quality relative to Public Health Goals for 2016 through 2018.

**RECOMMENDED ACTION:**

That the:

1. City Council hold a public hearing regarding the Report on Water Quality relative to Public Health Goals for 2016 through 2018.
2. City Council approve the Report on Water Quality relative to Public Health Goals for 2016 through 2018.
3. Corona Utility Authority (CUA) review, ratify and to the extent necessary direct that the City Council take the above actions.

**ANALYSIS:**

Provisions under the California Health and Safety Code<sup>1</sup> specify that water utilities prepare a report on water quality relative to Public Health Goals (PHG) by July 1, 2019. This applies to water systems with more than 10,000 service connections where the water quality has exceeded any of the established PHGs. Public Health Goals are set by the California Office of Environmental Health Hazard Assessment (OEHHA) which is part of the California Environmental Protection Agency. The PHGs are based only on public health risk considerations. The PHGs are not enforceable and are not required to be met by any public water system. At the federal level, Maximum Contaminant Level Goals (MCLG) are the equivalent to PHGs.

There are no regulations which outline requirements for the preparation of the Public Health Goal

Reports; however, the Association of California Water Agencies' (ACWA) Water Quality Committee prepared suggested guidelines for water utilities to use which were utilized in the preparation of this report.

The report must contain information on the contaminants that exceeded the PHG in drinking water, include an estimate of cost associated with the removal of such contaminants (to below the PHG using the best available technology), and include the health risk associated with each of the contaminants. The California Division of Drinking Water (DDW) specifies that a public hearing should be held sometime after July 1, 2019 for the purpose to accept and respond to public comment. At the same time, approval of the report from the governing council should be requested.

The City of Corona has over 43,000 drinking water connections. Sampling results presented exceedances above the PHG for arsenic, gross alpha particle activity, and coliform bacteria. For these reasons, we are required to present this triennial report that covers the calendar years of 2016, 2017, and 2018.

#### CONTAMINANTS FOUND IN OUR DRINKING WATER ABOVE THE PHG

**Arsenic:** A chemical naturally occurring in groundwater due to erosion, runoff from orchards, glass and electronic wastes. The PHG for arsenic is 0.004 parts per billion (ppb) and the Maximum Contaminant Level (MCL) is 10 ppb. Arsenic was detected above the PHG at Wells 3, 7A, 8A, 9A, 11A, 12A, 14, 15, 17A, 19, 21, 22, 25, 26, 27, 28, and 31. The average arsenic found in groundwater was 2.2 ppb. The calculated average after treatment and blending was 0.103 ppb.

The OEHHA has determined that the health risk associated with the PHG is one excess case of cancer in a million people and the risk associated with the MCL is 2.5 excess cases of cancer in 1,000 people exposed for a 70-year lifetime.

The best available technology to lower the level of arsenic below the PHG is reverse osmosis (RO). Current levels are already below the MCL. Additional reverse osmosis treatment is one option to try to lower the levels even further to below the PHG but at a considerable cost. Installation and operation of an RO treatment plant could cost anywhere between \$1.85 - \$4.38 per 1,000 gallons treated based on estimates provided by ACWA.

**Gross Alpha Particle Activity (gross alpha):** A measure of the total amount of radioactivity in a water sample attributable to the radioactive decay of alpha-emitting elements. It naturally occurs in groundwater due to erosion. There is no PHG for Gross Alpha; however, the MCLG is zero and the MCL is 15 pCi/L. A pCi/L is a unit for measuring radioactive concentrations.

Gross alpha was detected in the local groundwater at Wells 8A, 15, 17A, 19, 26, and 31. Average gross alpha detected was 11.6 pCi/L. The calculated average after treatment and blending was 0.089 pCi/L.

The United States Environmental Protection Agency (USEPA) has determined that the Health risk associated with the MCLG is zero and the risk associated with the MCL is one excess case of cancer in 1,000 people over lifetime exposure.

The best available technology for treating gross alpha is reverse osmosis (RO). Current levels are

already below the MCL. Additional reverse osmosis treatment is one option to further lower levels of gross alpha but at a considerable cost. Installation and operation of an RO treatment plant could cost anywhere between \$1.85 - \$4.38 per 1,000 gallons treated based on estimates provided by ACWA.

**Coliform Bacteria:** Includes a large group of many types of bacteria that occur throughout the environment. Most types of coliform bacteria are harmless to humans; however, some can cause mild illnesses and a few can lead to serious waterborne diseases. Coliform bacteria are often referred to as “indicator organisms” because they indicate the potential presence of disease-causing bacteria in water. The presence of coliform bacteria in water does not guarantee that drinking the water will cause an illness. DWP collects between 120 and 150 coliform bacteria samples every month. The MCLG for coliform bacteria is zero and the MCL is 5% on a monthly basis. During 2016, no more than 1% of these samples were positive in a month. During 2017, no more than 1% of these samples were positive in a month. During 2018, no more than 1% of these samples were positive in a month.

The best available technology for inactivating coliform bacteria is the protection of wells from coliform contamination, maintenance of a disinfectant residual throughout the distribution system, proper maintenance of the distribution system, and filtration and/or disinfection of surface and groundwater. The City already disinfects all water served to the public. DWP adds chloramine, and maintains a chloramine residual, to the distribution system to ensure that the water served is microbiologically safe. The chloramine residual levels are carefully controlled to provide the best health protection without causing the water to have undesirable taste and odor or increasing the disinfection byproducts. Other equally important measures include: an effective cross-connection control program, an effective monitoring program, a successful tank cycling program, routine dead-end flushing program and maintaining positive pressures in the distribution systems.

## SUMMARY

The City’s water system complies with all of the health-based drinking water standards and maximum contaminant levels required by the California Division of Drinking Water and the USEPA. Therefore, no actions to address any of the contaminants contained within the attached report are proposed at this time.

Staff is recommending the approval of the Report on Water Quality relative to Public Health Goals for the monitoring period of January 1, 2016 thru December 31, 2018.

## **COMMITTEE ACTION:**

Not applicable.

## **STRATEGIC PLAN:**

Not applicable.

## **FISCAL IMPACT:**

There is no fiscal impact associated with this recommended action.

## **ENVIRONMENTAL ANALYSIS:**

No environmental review is required because the proposed action is not a project governed by the

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California Environmental Quality Act.

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**REVIEWED BY:** TOM MOODY, GENERAL MANAGER

**REVIEWED BY:** KERRY D. EDEN, ASSISTANT CITY MANAGER/ADMINISTRATIVE SERVICES DIRECTOR

**REVIEWED BY:** MICHELE NISSEN, ASSISTANT CITY MANAGER

**SUBMITTED BY:** MITCHELL LANSDELL, INTERIM CITY MANAGER & EXECUTIVE DIRECTOR

**Attachments:**

1. Report on Water Quality Relative to Public Health Goals for 2016-2018
2. Water Quality and Public Health Goals 2019