WATER | ENERGY | LIFE

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES **DATE:** **JULY 14, 2025**

SUBJECT: **2025 PUBLIC WATER SYSTEM REPORT ON PUBLIC HEALTH GOALS AS REQUIRED BY CALIFORNIA HEALTH AND SAFETY CODE SECTION 116470(c)**

ISSUE:

Consider conducting a public hearing to review the public water system report on Public Health Goals (PHG) as required under California Health and Safety Code Section 116470(c).

RECOMMENDATION:

That the Board of Public Utilities:

1. Conduct a public hearing to review the public water system report on Public Health Goals (PHG) as required under California Health and Safety Code Section 116470(c).

2. Recommend that the City Council adopt the report on Public Health Goals (PHG) as required under California Health and Safety Code section 116470(c).

BACKGROUND:

The State Water Resources Control Board Division of Drinking Water (DDW) uses the PHG to develop health-based drinking water regulatory limits known as Maximum Contaminant Levels (MCLs). MCLs are developed to protect public health while considering applicable treatment technology, cost of treatment, and analytical capability. The MCL is the highest level of a contaminant allowed in drinking water that provides protection from increased health risk. The MCL is an enforceable level that all public water systems must meet. PHGs are not enforceable levels.

California Health and Safety Code section 116470 (b) requires that every three years, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:

1. Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.

2. Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.

3. Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief plainly worded description of these terms.

4. Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely at its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.

5. Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.

6. Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.

DISCUSSION:

Since Riverside Public Utilities (RPU) serves more than 10,000 customers, it must report any contaminants accordingly. RPU staff has prepared the required report, addressing all the required elements, attached as Attachment 2. California Health and Safety Code section 116470(c) specifies that agencies required to prepare such reports must hold a public hearing for the purpose of accepting and responding to public comment on the report and allows that public hearing to be part of any regularly scheduled meeting.

Public health goals (PHGs) are set exclusively on health risk without consideration to treatment feasibility, treatment costs, and analytical capability to detect the contaminant. The PHG level is determined by calculating the health risk based on long-term animal laboratory exposure studies. Maximum contaminant level goals (MCLGs) are the federal equivalent to the PHG. The PHG and MCLG represent the lowest level of a contaminant in drinking water that is believed to have no adverse health effect. In many instances, the PHG level is a theoretical calculation that cannot be tested or measured using available analytical equipment or methods.

The public water system report on PHGs only needs to address contaminants that are found at a level exceeding a PHG or a MCLG. The requirements under the legislation are unique to California and are in addition to the Consumer Confidence Report distributed to consumers each year. It is important to realize that:

1. Drinking water in full compliance with existing water quality standards may expose customers to some level of risk, although very low in comparison with other sources of health risk.

2. There can be significant costs and technology limitations associated with water treatment to reduce contaminants below their respective PHG.

3. No large public water system is expected to meet all PHGs and MCLGs.

During the reporting period from 2022 to 2024, seven constituents were found above their applicable PHG or MCLG. These constituents are summarized in Table 1 below and fully explained in the report attached as Attachment 2. The range of costs to reduce each constituent to a level below their applicable PHG or MCLG is estimated at $142-$3,293 per customer per year. Given the significant financial burden on customers of treating the water, when the effectiveness of the treatment processes to provide any significant reductions in constituent levels is uncertain, no treatment action is proposed but will continue to be closely monitored and factored into the department's long-term water treatment strategy.

Table 1 - PHG or MCLG Exceedance

Constituent, unit	**MCL or (AL)**	**RPU Average/ (Range)**	**DLR Detec-tion Limit**	**PHG or MCLG**	**Health Risk Category**	**Numeric Risk @ PHG**	**Numeric Risk @ MCL**	**Sources**	**BAT**
Arsenic, ppb	10	2.6/ (ND-6.5)	2	0.004	Cancer	1×10^{-6} (one per million)	2.5×10^{-3} (2.5 per thousand)	Erosion of natural deposits	IX
Chromium, Hexavalent, ppb	10	2.1/ N/A	0.1	0.02	Cancer	1×10^{-6} (one per million)	5×10^{-4} (five per ten thousand)	Industrial/ Erosion of natural deposits	IX & RO
Gross Alpha Particle Activity, pCi/L	15	ND/ (ND-4.7)	3	0	Cancer	0	up to 1×10^{-3} for ^{210}Po	Erosion of natural deposits	IX & RO
Nickel, ppb	100	ND/ (ND-29)	10	12	Developmental toxicity	NA	NA	Erosion of natural deposits	RO
Perchlorate, ppb	6	1.9/ (ND-2.9)	1*	1	Endocrine and developmental toxicity	NA	NA	Industrial	IX
Uranium, pCi/L	20	6.3/ (4.2-11.7)	1	0.43	Cancer	1×10^{-6} (one per million)	5×10^{-5} (five per hundred thousand)	Erosion of natural deposits	IX
Copper 90% Household Tap, ppb	1300	520**/ (ND-980)	50	300	Gastro-intestinal effects	NA	NA	Natural/ Home plumbing	TT

MCL=Maximum Contaminant Level, PHG=Public Health Goal, MCLG=MCL Goal, BAT=Best Available Technology, IX=Ion Exchange, TT=Treatment Technique, ppb=part per billion, ppt,= part per trillion, pCi/L = Picocurie per liter, RO = Reverse Osmosis
*The perchlorate DLR was reduced from 2 ppb to 1 ppb in 2024.
**90th Percentile of 51 samples

PHGs are not enforceable standards and RPU's Water Quality meets all State and Federal regulations.

FISCAL IMPACT:

There is no fiscal impact associated with this item.

Prepared by: Robin Glenney, Utilities Assistant General Manager/Water
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Certified as to
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Approved by: Rafael Guzman, Assistant City Manager
Approved as to form: Rebecca McKee-Reimbold, Interim City Attorney

Attachments:

1. Public Notice
2. Public Health Goal Report
3. Exhibits
4. Presentation