



Legislation Text

File #: 22-0295, **Version:** 1

TO:

Honorable Mayor and Members of the City Council

THROUGH:

Bruce Moe, City Manager

FROM:

Erick Lee, Public Works Director

Lou Vargas, Utilities Manager

Nicholle Petroff, Management Analyst

SUBJECT:

Conduct Public Hearing Regarding the Triennial Water System Report on Public Health Goals (Public Works Director Lee).

(Estimated Time: 10 Min.)

A) CONDUCT PUBLIC HEARING

B) RECEIVE AND FILE REPORT

RECOMMENDATION:

Staff recommends that the City Council conduct a public hearing and receive and file the Triennial Water System Report on Public Health Goals.

FISCAL IMPLICATIONS:

There are no immediate fiscal implications at this time.

BACKGROUND:

Section 116470(b) of the California Health and Safety Code requires public water systems serving more than 10,000 service connections to prepare a written report available upon request every three years that compares the levels of drinking water constituents with their respective Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs). Additionally, the City is required to hold a public hearing for the purpose of accepting and responding to public comments on the report.

The PHGs report is a legislative requirement to provide information on the detection of any contaminants above levels stated in PHGs adopted by the State Office of Environmental Health Hazard Assessment (OEHHA) and are established by the California Environmental Protection Agency (EPA). MCLGs are established by the United States Environmental Protection Agency (USEPA). Additionally, the PHG report intends to provide an estimate of the cost to reduce the contaminant from drinking water to non-detectable levels regardless of how minimal the risk might be.

PHGs and MCLGs are not water quality standards; they are goals identifying extremely small health risks. As indicated in the attached Annual Water Quality Reports, the water distributed by the City

meets water met all USEPA and State of California primary drinking water health standards for the past three years.

DISCUSSION:

As the data summarized in this report shows, the quality of drinking water in Manhattan Beach meets all State of California, Division of Drinking Water (DDW) and USEPA standards established to protect public health.

Water quality data collected in the last three years (2019-2021) is considered in the 2022 PHG report. These water samples were collected by the City's Water Plant Operators and analyzed by a certified laboratory holding a drinking water State Environmental Laboratory Accreditation Program (ELAP) Certification and National Environmental Laboratory Accreditation Program (NELAP) Certification, which are required for performing these type of analyses. The following constituents were detected at one or more locations within the drinking water system at levels that exceed the applicable PHGs or MCLGs:

Gross Alpha Particle Activity (Gross Alpha)

The drinking water Maximum Contaminant Level (MCL) for gross alpha is 20 picoCuries per liter (pCi/L). A picoCurie is a trillionth of a curie, which is a unit of radioactivity. Because gross alpha is associated with a group of radionuclides rather than a single constituent, OEHHA concluded that a PHG was not practical. Gross alpha is carcinogenic, so the MCLG set by the USEPA is 0 pCi/L. California's Detection Limit for Reporting (DLR) is 3 pCi/L. Any data below the State's DLR is considered "non-detect" (ND). The numerical health risk at the MCL is 1×10^{-3} , which refers to one cancer case per 1,000 population. The numerical health risk at the MCLG is 0. The Best Available Technology (BAT) for removal of gross alpha is reverse osmosis (RO).

Manhattan Beach is not required to test for radionuclides on an annual basis. Sampling by the City in 2020 for gross alpha yielded a non-detect result. Metropolitan Water District also sampled its water during 2020, which had detections of gross alpha above the MCLG as shown below:

						MWD		City	
Year	Parameter	Units	MCL	MCLG	State DLR	Average	Range	Average	Range
2020	Gross Alpha	pCi/L	15	0	3	ND	ND-3	ND	--

Gross Beta Particle Activity (Gross Beta)

The drinking water MCL for gross beta is 50 pCi/L. Similar to gross alpha, gross beta is also associated with a group of radionuclides rather than a single constituent, so OEHHA did not establish a PHG. Gross beta is a carcinogen, so the MCLG set by the USEPA is 0 pCi/L. California's DLR is 4 pCi/L. The numerical health risk at the MCL is 2×10^{-3} , which refers to two cancer cases per 1,000 population. The numerical health risk at the MCLG is 0. The BAT for removal of gross beta is reverse osmosis (RO) and ion exchange (IX).

Manhattan Beach follows requirements stated in Section 64442, Title 22, California Code of

Regulations and is not currently required to test for gross beta. Metropolitan Water District sampled its water during 2020 and 2021, which had detections of gross beta above the MCLG as shown below.

						MWD	
Year	Parameter	Units	MCL	MCLG	State DLR	Average	Range
2020	Gross Beta	pCi/L	50	0	4	ND	ND - 7
2021	Gross Beta	pCi/L	50	0	4	ND	ND - 6

Uranium

The drinking water MCL for uranium is 20 pCi/L. The PHG is 0.43 pCi/L. California's DLR is 1 pCi/L. Any data below the State's DLR is considered non-detect (ND). OEHHA developed a PHG for drinking water based on uranium's carcinogenicity and kidney toxicity. The numerical health risk at the MCL is 5×10^{-5} , which refers to five cancer cases per 100,000 population. The numerical health risk at the PHG is 1×10^{-6} , which refers to one cancer case per 1,000,000 population. The BAT for uranium removal includes reverse osmosis (RO), ion exchange (IX), lime softening, and coagulation/filtration.

Radiological sampling is not required annually for the City. Manhattan Beach was not required to sample groundwater for Uranium during 2019 through 2021, but previous results from 2017 and 2018 were non-detect. Metropolitan Water District sampled its water for uranium during 2020, which had detections of uranium above the PHG as shown below.

						MWD	
Year	Parameter	Units	MCL	PHG	State DLR	Average	Range
2020	Uranium	pCi/L	20	0.43	1	ND-3	1.3

Bromate

The MCL or State drinking water standard for bromate is 10 micrograms per liter ($\mu\text{g/L}$). A microgram is a millionth of a gram. The PHG is 0.1 microgram per liter ($\mu\text{g/L}$). California's DLR is 1 $\mu\text{g/L}$. Any data below the State's DLR is considered ND. OEHHA has developed a Public Health Goal for bromate in drinking water, based on its carcinogenicity. The numerical health risk at the MCL is 1×10^{-4} , which refers to one cancer case per 10,000 population. The numerical health risk at the PHG is 1×10^{-6} , which refers to one cancer case per 1,000,000 population. Because bromate is a disinfection byproduct, the BAT for bromate involves control of the ozone treatment process to reduce its production.

Manhattan Beach follows requirements stated in Section 64534.2 (c), Title 22, California Code of Regulations and is not currently required to test for bromate. Metropolitan Water District sampled its water for bromate in 2019, 2020, and 2021, which had detections of bromate as shown below.

						MWD	
Year	Parameter	Units	MCL	PHG	State DLR	Highest RRA*	Range

2019	Bromate	µg/L	10	0.1	1.0	5.6	ND - 8.4
2020	Bromate	µg/L	10	0.1	1.0	4.4	ND - 6.0
2021	Bromate	µg/L	10	0.1	1.0	4.5	ND - 9.8

*RAA = Running Annual Average. Highest RAA is the highest of all Running Annual Averages calculated as the average of all samples collected within a 12-month period. This is how compliance is determined for the bromate MCL.

CONCLUSION:

As indicated above, drinking water quality in Manhattan Beach met all State of California, DDW and USEPA standards established to protect public health during this most recent three year period.

Any attempts by the City to further reduce the levels of the constituents identified in this report that are already significantly below the health-based MCLs would require costly treatment processes. Additionally, the effectiveness of these treatment processes is uncertain, and the health protection benefits of these hypothetical reductions are not clear and may not be quantifiable. Therefore, staff recommends that the City Council conduct the public hearing, receive and file this report, and take no further action at this time.

PUBLIC OUTREACH:

A public hearing notification was published in The Beach Reporter on July 28, 2022 and August 4, 2022, inviting public oral and written comments on this item.

ENVIRONMENTAL REVIEW:

This action is exempt from the California Environmental Quality Act (Public Resources Code § 21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., Tit. 14, §15308).

LEGAL REVIEW:

The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

ATTACHMENTS:

1. 2022 Triennial Public Health Goal Final Report
2. Public Health Goal List
3. Health Risk Info
4. 2019 Annual Water Quality Report
5. 2020 Annual Water Quality Report
6. 2021 Annual Water Quality Report