



April 28, 2022

RE: Comment Letter – Hexavalent Chromium Workshop

Public comments on the California State Water Resources Control Board proposed Maximum Contaminant Level for hexavalent chromium

Submitted via email to commentletters@waterboards.ca.gov

We submit these comments to the California State Water Resources Control Board (Water Board) in opposition to the proposed Maximum Contaminant Level, or MCL, of 10 parts per billion, or ppb, for hexavalent chromium (Cr-6) and urge the state to prioritize public health and set the MCL as close as possible to the public health goal for Cr-6, as required by California law.

Analysis by the Environmental Working Group, a nonprofit research and advocacy organization, shows the number of community water systems across California and the approximate number of people harmed by hexavalent chromium. The analysis shows a picture of widespread drinking water contamination, with millions of Californians exposed to Cr-6 at concentrations vastly exceeding the public health goal of 0.02 ppb.

Table 1: Number of California community water systems and approximate population exposed at different concentrations of Cr-6 in drinking water.

Cr-6 concentration	Number of community water systems	Population
Over 10 ppb	92	788,798
Over 9 ppb	107	836,579
Over 8 ppb	136	990,503
Over 7 ppb	164	1,439,237
Over 6 ppb	205	1,679,931
Over 5 ppb	249	1,977,022
Over 4 ppb	324	3,260,519
Over 3 ppb	432	5,610,281
Over 2 ppb	554	8,086,867
Over 1 ppb	782	12,119,775

Source: Data for 2013-2019 were downloaded from https://www.waterboards.ca.gov/drinking_water. For each water system, mean concentration of Cr-6 was calculated by arithmetic averaging all available test results for the time period. 1 ppb is the current detection limit for purposes of reporting for hexavalent chromium in California.

These are the key points which we would like the Water Board to take into consideration:

1. The proposed MCL of 10 ppb does not protect public health.
2. The proposed MCL fails to meet the Water Board’s statutory obligations.
3. The Water Board’s own analysis shows 3 ppb to be economically and technically feasible.



4. Community members should be clearly informed that the “legal” limit for Cr-6 proposed by the Water Board is not a safe level.

The background and rationale for our recommendations are listed below.

1. The proposed MCL of 10 ppb does not protect public health.

The state Water Board’s proposed legal limit for Cr-6 leaves millions of Californians exposed to harmful levels of this dangerous contaminant. The public health goal of 0.02 ppb is the exposure concentration that can be considered safe, according to the state’s own analysis. We emphasize that Table 1 shows that setting the MCL at 10 ppb effectively eliminates the need for any protective action for most community water systems currently serving water with unsafe levels of Cr-6. The table documents the number of water systems with a long-term concentration average of Cr-6 above 1 ppb, the state’s current detection limit for purposes of reporting.

We are dismayed that California water utilities continue to oppose even a weak proposal of 10 ppb, knowing that such a legal limit, if finalized, would still leave millions of Californians unprotected from the carcinogen Cr-6 in their drinking water. The Environmental Working Group’s analysis of California’s water systems finds that at least 12 million Californians – 30 percent of the state’s population – are exposed to average Cr-6 concentrations above 1 ppb. We emphasize that this is significantly above the level state scientists have determined would not cause elevated cancer risk in the long term.

2. The proposed MCL of 10 ppb fails to meet the Water Board’s statutory obligations.

California Health and Safety Code §116365 requires the Water Board to set the MCL “at a level that is as close as feasible to the corresponding public health goal.” Although it requires the Water Board to consider the “technological and economic feasibility of compliance with the proposed primary drinking water standard,” it also requires “primary emphasis on the protection of public health.” The Water Board has proposed a standard that, if implemented, would result in Californians consuming drinking water that poses a significant risk of cancer, because the proposed MCL exceeds by 500-fold the state’s public health goal of 0.02 ppb for cancer risks. Further, the timing of implementation the Water Board proposes means that improvement in water quality would be delayed even longer for some of the most severely affected community water systems in California.

3. The Water Board’s own analysis shows 3 ppb is technologically and economically feasible.

The Water Board’s March 2022 staff report concluded that point-of-use reverse osmosis systems that are readily available in California are certified to decrease Cr-6 concentration to 3 ppb. If



point-of-use systems are implemented as part of the state's economic feasibility strategy for small community water systems, then 3 ppb should be the practical and feasible target. A level of 3 ppb, while not fully responsive to the Cr-6 contamination problem, would nonetheless obligate utilities to protect millions more Californians from the cancer-causing “Erin Brockovich chemical” than the Water Board's MCL proposal.

The Water Board's proposed Cr-6 MCL of 10 ppb is far above the level that the state's own analysis shows to be both economically and technically feasible. The more health-protective option, a 3 ppb MCL, was not advanced by the Water Board. Further, its economic analysis completely failed to evaluate water treatment and removal of co-occurring contaminants. Often, water sources used to produce drinking water are found to have several co-contaminants. All three treatment technologies the Water Board evaluated for Cr-6 treatment – ion exchange, reduction/coagulation/filtration, and reverse osmosis – remove Cr-6 and also decrease the concentrations or remove many other drinking water contaminants of concern simultaneously without affecting the collective cost.

Arsenic, nitrates, radon, radium, perchlorate, per- and polyfluoroalkyl substances, or PFAS, and Cr-6 are present in California's water sources and harm Californians' health. When state regulators look at drinking water treatment costs, they must not consider economic feasibility in a vacuum, since that approach completely ignores the overall public health benefits. The Water Board must assess the public health and economic co-benefits that treatment for Cr-6 would provide, thanks to simultaneous reduction in the concentrations of other toxic, co-occurring contaminants in many California water systems.

4. Community members must be clearly informed that the “legal” limit proposed for Cr-6 by the Water Board is not necessarily a safe level.

We strongly believe it is the state's duty to ensure that the water Californians drink does not just meet the legal standard but is also safe – and the state's own scientists have officially determined that the safe level for Cr-6 in drinking water is 0.02 ppb, far, far lower than the Water Board's proposal. This gap between legal and safe is unacceptable for the millions of Californians exposed to this chemical in their drinking water. Californians need to be aware and warned that an MCL of 10 ppb leaves them unprotected from elevated risk of cancer due to Cr-6.

Should the Water Board finalize the MCL at a level so drastically exceeding the public health goal, a decision we would strongly oppose, we demand that the Water Board immediately identify the communities that would be left unprotected. We further demand that water utilities with Cr-6 levels above the public health goal be required by the Water Board to inform all customers, prominently, and every month, via their water bills, that the levels of Cr-6 in their tap water are unsafe, based on the analysis published by California's Office of Environmental Health Hazard Assessment.



Know your environment.
Protect your health.

Finally, we call on the California Environmental Protection Agency and the state attorney general to investigate, identify and, as appropriate, prosecute polluters that have demonstrably contributed to the health and economic burden of Cr-6's effect on hundreds of communities and millions of residents in our state. It is a fact that in addition to naturally occurring geologic and hydrologic conditions that have caused Cr-6 to be in groundwater, historic operations and continuing operations have and are polluting the state's water resources. It is unacceptable that those polluters be let off the hook while ratepayers and the state deal with their legacy pollution. On behalf of millions of Californians who have been exposed to Cr-6 due to pollution from which private companies profited, state agencies and officials must pursue justice through litigation.

In conclusion, we disagree with the Water Board's inadequately supported decision to propose a weak standard of 10 ppb that will continue the harmful exposure to Cr-6 many Californians have already suffered from for decades. The Water Board must set an MCL as close as possible to the public health goal, and Californians must be warned of unsafe drinking water due to Cr-6 drinking water contamination.

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