



American Water Works
Association



CALIFORNIA-NEVADA SECTION
American Water Works Association

Statement of Dr. Timothy Worley to the California Department of Public Health
On Proposed Rulemaking under Title 22, California Code of Regulations,
Hexavalent Chromium MCL (DPH-11-005)
Los Angeles, California Public Hearing
October 11, 2013

I am submitting written comments on behalf of the California-Nevada Section of the American Water Works Association, and the international organization with which we are affiliated, the American Water Works Association.

While we have members from public health and government, we primarily focus on the technical issues of treating and distributing safe drinking water. We are recognized for our expertise in these areas. In fact, the proposed drinking water standard of today's hearing is only possible because of proactive and collaborative research, carried out and funded in part by drinking water utilities and associations such as AWWA, the Water Research Foundation, and ACWA.

Let me begin by stressing that as water professionals, our first priority is protecting public health. A low Cr(VI) standard is a difficult public policy challenge. In setting a sound standard, the Department must be certain that positive health benefits from treatment are realized and that households, particularly economically disadvantaged households, are not exposed to even more critical risks to their health and wellbeing due to the cost associated with treatment to meet the Cr(VI) standard.

Our comments reflect a firm commitment to the Safe Drinking Water Act principles, as they apply to Cr(VI). The Initial Statement of Reasons for this proposed regulation states that, "Primary MCL are based on health protection, technical feasibility, and costs." Expressed another way: "One of those requirements is that the Department set the MCL as close as possible to the public health goal ... to the extent technologically and economically feasible." This is the balance the Department is required by law to establish.

Our comments incorporate, for the record, technical analyses of the proposed regulation by Jacobs Engineering Group and Water Quality and Treatment Solutions, some of the foremost experts on the subject of Cr(VI) occurrence and treatment. I will just summarize a few main points in my limited time.

1. **Chromium (VI) in groundwater mostly occurs naturally, and in many more water sources than estimated by CDPH.** The Department recognizes that the hexavalent form of chromium is found in the environment as a matter of geology. However, its occurrence in water sources above the proposed MCL has been significantly underestimated by CDPH. Instead of 311 sources impacted by the proposed MCL at 10 ppb, Jacobs calculates that 1,360 sources are impacted. This is over 1,000 more sources than in the Department's estimate.
2. **The impact to individuals and businesses for water treatment to remove Cr(VI) was substantially understated, and will be felt on their water rates.** When treatment costs accurately reflect actual household water usage, actual peaking factor used in facility design, land acquisition, and building construction, the proposed Cr(VI) standard will increase treatment costs for ratepayers much more than the Department estimated. Using a more accurate calculation, the total annualized cost to ratepayers statewide is over \$616 Million for the proposed standard of 10 ppb—about four times higher than the Department's estimate.
3. **Compliance with the proposed MCL of 10 ppb is unaffordable to many communities.** The Department did not address whether compliance would be affordable, in contrast to its last drinking water regulation for arsenic. Using the Department's own analysis, compliance for small systems with the proposed Cr(VI) standard will be far more challenging than for arsenic. Looking at Median Household Income (MHI) as the benchmark of affordability, the household cost to remove Cr(VI) will be 9.6% of MHI, while for arsenic it is 3.6% of MHI. After more than a decade since the arsenic rule became final, many small systems are not able to comply with the standard. The Department needs to carefully consider the affordability of this proposed regulation.
4. **Water systems must be given a reasonable time to come into compliance with the final regulation.** Most drinking water systems will need time to explore the most cost-effective treatment method, secure capital project financing and water rates to support it, in many cases acquire land, and then install and commission new treatment systems. The Department should follow EPA's implementation of the federal Safe Drinking Water Act and allow time for systems to achieve compliance.
5. **A proposed requirement for studies of chromium in the distribution system creates regulatory confusion and should be dropped.** It is not clear how the study is to be performed, what the purpose of the study is, and what the regulatory consequences are of any findings drawn from the study. The lack of clarity in this provision of the regulation makes it untenable.

We appreciate the opportunity to provide these comments in order to improve the basis for a drinking water standard for Cr(VI). Thank you.

Timothy Worley, PhD
AWWA—California-Nevada Section
10435 Ashford Street
Rancho Cucamonga, CA 91730
(909) 481-7200
tworley@ca-nv-awwa.org