



COACHELLA VALLEY WATER DISTRICT

Established in 1918 as a public agency

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August 17, 2023

VIA EMAIL AT COMMENTLETTERS@WATERBOARDS.CA.GOV

Ms. Courtney Tyler
Clerk of the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

Dear Ms. Tyler:

Subject: SWRCB-DDW-21-003: Hexavalent Chromium MCL

The Coachella Valley Water District (CVWD) appreciates the opportunity to comment on the State Water Resources Control Board (State Water Board)'s proposed Hexavalent Chromium (Cr6) Maximum Contaminant Level (MCL) of 10 parts per billion (ppb) in water supply. CVWD is a public agency responsible for providing high quality water supply at reasonable cost to approximately 270,000 residents throughout most of the Coachella Valley. Cr6 occurs naturally in the minerals and groundwater found adjacent to the San Andreas fault system that divides the Coachella Valley groundwater basin. As such, about one-third of CVWD's 100 wells distributed over a 200 square mile area exceeded the proposed Cr6 MCL of 10 ppb. While CVWD understands the importance of establishing an MCL to protect public health, we remain concerned with the following deficiencies as they have not been adequately addressed as previously commented. Concurrently, CVWD is submitting a separate letter containing timely written comments on SWRCB's Draft Environmental Impact Report for the Cr-6 MCL and related California Environmental Quality Act (CEQA) obligations.

1. The State Water Board may not adopt the MCL until the Office of Environmental Health Hazard Assessment (OEHHA) completes its update of the Public Health Goal (PHG)

California Health & Safety Code section 116365(e)(2) requires that a "public health goal shall be published by the Office of Environmental Health Hazard Assessment at the same time the State Water Board proposes the adoption of a primary drinking water standard for any newly regulated contaminant." Although California has an MCL for total chromium, it does not have one for Cr6. Therefore, Cr6 is a newly regulated contaminant.

In 2016, OEHHA announced its decision to update the PHG it had previously adopted for Cr6 in 2011. On March 27, 2023, OEHHA issued a second data call related to its update of the Cr6 PHG. Although OEHHA informally suggested to the State Water Board in 2022 that any update to the PHG might not vary from the 2011 PHG, OEHHA's formal actions demonstrate that it is currently in the official process of updating the PHG. As such, the

State Water Board is required by Section 116365(e)(2) to wait until the PHG update process is completed before it may consider adoption of the MCL. If the State Water Board adopts the MCL now, it will be out of compliance with Section 116365(e)(2) and its action will be based on outdated science. This in turn would mean that the State Water Board's economic feasibility and CEQA analysis would be flawed because they would analyze an MCL that did not consider the updated PHG. Thus, consideration of the MCL at this time would be contrary to legal requirements. CVWD requests that the State Water Board permit the OEHHA process to be completed prior to consideration of the MCL.

2. The State Water Board's economic feasibility analysis is not consistent with legal requirements

California Health and Safety Code sections 116365(a) and (b) require the State Water Board to consider the technological and economic feasibility of compliance with the proposed MCL. The State Water Board's previous effort to adopt an MCL for Cr6 failed to comply with these requirements. For the reasons set forth below, CVWD believes that the State Water Board has similarly failed to comply with this requirement regarding this MCL.

A. Economic feasibility needs to be assessed under the updated PHG

As discussed above, OEHHA is updating the PHG. The State Water Board cannot perform a meaningful economic feasibility analysis until the PHG is updated. Any economic feasibility analysis performed under the prior PHG would be inconsistent with legal requirements and based on outdated science.

B. Economic feasibility needs to be informed by a valid CEQA document

As discussed in CVWD's separate comment letter on the CEQA document, the State Water Board has not complied with many of CEQA's fundamental requirements, including the mandate to assess meaningful and feasible project alternatives and cumulative impacts (such as the Project's cumulative impacts combined with other current or pending MCLs). In the absence of a CEQA-compliant EIR, the State Water Board is unable to perform a legally valid feasibility assessment under Section 116365. An MCL may appear to be capable of being done in a vacuum but might prove infeasible or more environmentally impactful when assessed in light of a CEQA-compliant EIR, which must help inform the State Water Board's Section 116365 analysis. Rather than actually assessing alternatives and cumulative impacts under CEQA to help inform the State Water Board's analysis under Section 116365, the State Water Board has done the opposite; it has assumed that an MCL of 10 ppb is required under Section 116365 and then used that assumption to avoid conducting meaningful CEQA review of MCL's at different levels. Based on that errant assumption, the State

Water Board has not only failed to conduct the legally required analysis necessary to comply with CEQA but has also failed to conduct an informed feasibility analysis under Section 116365. Such an approach is therefore inconsistent with both Section 116365 and CEQA.

C. Over reliance of RCF in cost analysis

The State Water Board's cost analysis is almost exclusively based on the assumption that 98% of impacted systems can use Reduction/Coagulation/Filtration (RCF) as the Best Available Technology (BAT). However, the State Water Board provides little to no evidence that RCF could be used by 98% of the impacted systems. The ability to use RCF also depends on certain factors, including direct access to sanitary sewer systems which some areas within CVWD's service boundary are lacking as they are still employing septic tanks. Because the cost analysis relies on a false assumption regarding the ability to use RCF as BAT, it is flawed. The State Water Board must conduct a meaningful assessment of which impacted systems could use RCF and recalculate its cost estimates accordingly.

D. Alternative best available technology (BAT)

CVWD urges the State Water Board to consider alternative treatment methods in addition to the proposed BATs (ion exchange, RCF, and reverse osmosis). CVWD successfully demonstrated a bench scale study and a full-scale demonstration of the addition of stannous chloride to reduce Cr6 concentrations well below the proposed MCL of 10 ppb. This treatment method is the most cost-effective option and can be employed immediately when CVWD has gained approval from the Division of Drinking Water District 20 (DDW) to launch a full-scale implementation to reduce Cr6 that is specific to its water systems. The stannous chloride full-scale implementation plan was submitted to DDW in January 2023 but has not yet been approved. CVWD requests action on its application to use stannous chloride.

E. Use of statewide per capita estimates

The State Water Board's cost analysis includes a per capita statewide cost estimate of \$4.75 per person per year and concludes that this is economically feasible. However, the cost of this MCL will uniquely burden individual systems, many of which are located in disadvantaged communities that have naturally occurring Cr6 in their groundwater sources. Using a statewide cost estimate is therefore not relevant to a feasibility analysis. Something that may be capable of being done if the cost is spread equally to residents statewide tells the public nothing about whether something is capable of being done in a small, disadvantaged community.

F. Unsupported standard for feasibility at the individual system level

At the individual system level, the State Water Board appears to use an increase of \$30 per month per household as its threshold for affordability. However, there is no meaningful explanation of why \$30 per month for one MCL (among many) is affordable across the different types of impacted systems and communities. Without a standard that is based on evidence, setting a standard of \$30 per month per household is arbitrary.

G. Need for State funding underestimated and illusory

A key component of the State Water Board's economic feasibility analysis is the assumption that State funding will be sufficient to reduce the cost burden of the MCL and thereby make it economically feasible for certain systems that could not otherwise afford to implement it. However, because, as the State Water Board acknowledges, funding is not guaranteed, the economic feasibility analysis is illusory as to these systems. Only if there is a dedicated funding source will the MCL be feasible for certain systems.

In addition, the State Water Board's assessment of the funding demand, timing, availability and disbursement process is suspect. The State Water Board should better assess the peaks in demand that will occur due to the timing of the MCL's implementation. The State Water Board's assessment of the availability of funding is also based on a period of time when significant state and federal funding was available. This is not representative of current or likely future conditions. In fact, it is understood that the State Water Board is currently *withdrawing* funding commitments it had previously made in grant funding due to lack of funds. Finally, the State Water Board funding process has proven to be a difficult and time-consuming process for many systems, especially those most in need. The State Water Board's analysis should better address these variables.

3. Full peer review

California Health and Safety Code section 57004 requires the State Water Board to cause one of certain specified academic institutions "to conduct an external scientific peer review of the scientific basis for any rule." Here, the State Water Board has caused a peer review to be conducted on part, but not all, of the MCL. Specifically, the State Water Board caused a peer review to be conducted regarding BAT. However, BAT is just one aspect of the MCL. A peer review of one aspect of the MCL is not the same as a peer review of the scientific basis of the rule. For this reason, compliance with Section 57004 has not occurred.

4. Compliance timeline for the proposed MCL

The proposed compliance period of 2 years for large water systems such as that of CVWD remains a challenge. The Federal Safe Drinking Water Act allows a period of up to 5 years for water systems to install capital facilities needed to comply with new federal drinking water MCLs. The State Water Board should consider this compliance timeline as a base period for which water systems should strive to comply with the MCL as the practicalities of planning, designing, funding, permitting, and installing new treatment facilities need to be considered and flexibility should be granted depending on the progress made. However, CVWD can potentially comply with this timeline should it receive approval to implement the stannous chloride treatment workplan at full-scale which was submitted to DDW in January 2023.

5. Analytical methods for the detection of Cr6 in the proposed MCL

CVWD owns and operates a municipal water quality laboratory (CVWD Lab) that provides laboratory analytical services to CVWD's two drinking water public water systems. CVWD Lab also provides laboratory analytical services to many state small systems located in rural parts of the Coachella Valley and food vendors that are regulated by the County of Riverside Department of Environmental Health (DEH) as well as private well owners. Following the closure of DEH's local laboratory in 2008, CVWD Lab became the only laboratory in Coachella Valley able to provide local laboratory services to many of the disadvantaged communities located in the eastern Coachella Valley.

CVWD Lab is accredited by the State Water Board's Environmental Laboratory Accreditation Program (ELAP) to analyze hexavalent chromium in drinking water using Environmental Protection Agency (EPA) Method 218.6 by ion chromatography (IC). As such, CVWD's comments relating to this method are as follows:

A. Include maximum holding time of 14 days and sample preservation with one of the buffers described in EPA Method 218.7 for samples analyzed by either 218.6 or 218.7

The State Water Board's website at link below indicates that "We concur with US EPA's maximum holding time of 14 days for properly preserved drinking water samples. At this time, we recommend that samples be preserved in the field with one of the buffers described in EPA Method 218.7"

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6sampling.html

CVWD requests that this holding time and preservation be included in the proposed regulations to clarify the maximum holding time and type of preservation allowed when collecting drinking water samples for hexavalent chromium analysis.

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B. Need to clarify the level of accuracy required for laboratories using EPA Method 218.6 to meet the proposed detection level for reporting (DLR) of 0.1 micrograms per liter (ug/L)

State Water Board's notice of proposed rulemaking for the hexavalent chromium MCL did not include a level of accuracy to meet the proposed DLR of 0.1 ug/L for laboratories using EPA Method 218.6. Standard Methods 3020 B (22nd Edition) indicates that the measured concentration for a reporting limit verification (RLV) sample should be within a fixed percentage of the true value and uses 50-150% as an example. Section 9.2.4.2 of EPA Method 218.7 indicates to confirm the minimum reporting level by using 50-150 percent recovery for its prediction interval of results (PIR). Section 9.2.2 in EPA Method 218.6 only indicates that the method detection level (MDL) must be sufficient to detect hexavalent chromium at the required level according to compliance monitoring regulations and refers the reader to Section 1.2 of the method. Section 1.2 refers the reader to the Code of Federal Regulations (40 CFR Part 141.23 for drinking water). 40 CFR Part 141.23 does not include a detection limit for hexavalent chromium. Including a level of accuracy in the proposed regulations will be useful for laboratories using EPA Method 218.6 to make the determination whether they can meet the proposed DLR. CVWD recommends a level of accuracy of 50-150% to meet the DLR of 0.1 ug/L for laboratories using EPA Method 218.6.

Based on these comments, CVWD requests that the State Water Board correct the deficiencies identified here and in CVWD's CEQA comment letter prior to consideration of the MCL. If you have any questions, please contact me at (760) 393-7792, extension 2286.

Sincerely,



Joanne Y. Le
Director of Environmental Services

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