FAQ Chromium-6 at Ohlone Elementary & Renaissance High School

1. What is chromium-6?

Chromium-6 is a heavy metal. It can occur naturally in the environment due to the erosion of natural chromium deposits. It has been used historically in the chrome plating of metals, as an ingredient in dyes and pigments, in the leather tanning process, and as a wood preservative.

2. What is a Maximum Contaminant Level (MCL) and Public Health Goal (PHG)?

A **Maximum Contaminant Level (MCL)** is the legal limit of a contaminant that is allowed in drinking water. For example, the MCL for arsenic is 10ppb. Federal MCLs are set by the EPA under the Safe Drinking Water Act. California can set stricter MCLs through the State Water Resources Control Board. These limits are set by taking into account public health as well as costs and technical feasibility.

The Office of Environmental Health Hazard Assessment (OEHHA) at the California Environmental Protection Agency also sets a **Public Health Goal (PHG)** for each contaminant. For example, the PHG for hexavalent chromium is 0.02 ppb. This is the level that is considered safe for human consumption based only on public health studies, and not accounting for cost and technical feasibility.

3. What do we know about health risks of consuming chromium-6 in drinking water?

Over the long-term, chromium-6 in drinking water has been linked to increased risk of cancer. While there have been more studies on workplace exposure, the OEHHA developed a public health goal (PHG) of 0.02 parts per billion (ppb) based on the best available peer-reviewed science of chromium-6 in drinking water experts in toxicology, epidemiology, and public health synthesized the science to develop this public health goal. See this website for more information chromium-6 PHG: https://oehha.ca.gov/water/public-health-goal-fact-sheet/final-technical-support-document-public-health-goal-hexavalent

In response to community concerns about hand washing and washing vegetables with water with chromium-6, a State Water Resources Control Board toxicologist reported that: "The main route of exposure for hexavalent chromium is by ingestion. Dermal exposure does not appear to be an issue. To further reduce exposure, it could be helpful to dry off (blot, salad spin) washed vegetables and dry wet dishes to reduce ingestion of small amounts of water containing hexavalent chromium."

4. Why is there no Maximum Contaminant Level (MCL) for chromium-6 in drinking water at this time? When will there be one again?

There is not currently a legal limit or MCL for chromium-6 due to a 2017 court case that challenged the way in which the state conducted an economic feasibility analysis. Previously the MCL for chromium-6 was 10 ppb. *The court case did not dispute the health risk of chromium-6.* The court also ordered the State Water Board to adopt a new MCL for chromium-6. We recommend tracking this State Water Board webpage, and they are expected to release a white paper this fall detailing their process and timeline for releasing the new standard: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.html

5. What is the water quality and long-term solution for Ohlone Elementary?

The Sunny Mesa Water System, operated by Pajaro Sunny Mesa Community Service District, provides drinking water to Ohlone Elementary. The 2017 Consumer Confidence Report (https://drinc.ca.gov/ear/CCR/CCR2017CA2700773.pdf) shows that this water system sources its water from two wells that contain 12 and 16 parts per billion (ppb) of chromium-6, which is above the former maximum contaminant level (MCL), or legal limit, of 10ppb. This report also indicates that the levels for both wells fluctuate with chromium-6 detections in 2017 ranging between 10-12 ppb for Well 2 and between 9.6 and 16 ppb for Well 1. Data from the State Water Board's Drinking Water Watch online searchable public database (https://sdwis.waterboards.ca.gov/PDWW/) confirms fluctuating levels of both chromium-6 and total chromium in both wells in the time period between 2003 and 2019 with the vast majority of the samples over 10 ppb. See graph and data. Both Well 1 and Well 2 are currently active.

For Ohlone, Pajaro Sunny Mesa Community Service District (CSD) had engineering consultants complete an alternative's analysis for the CSD to review different long-term solutions to address

the chromium-6 in the Sunny Mesa system. The preferred and recommended alternative is to physically consolidate the Sunny Mesa Water System with the Pajaro Water System, which has a more reliable water supply and also of better quality. The CSD has indicated they are willing and interested in moving forward with this project, if and when funding becomes available.

6. What is the water quality and long-term solution at Renaissance High School?

Renaissance High School operates their own water system serving only their school, which was served by a well with 21-23 ppb of chromium-6 according to their 2016 Consumer Confidence Report (https://drinc.ca.gov/ear/CCR/CCR2016CA4400758.pdf).

For Renaissance, Soquel Creek Water District staff reported that they are open to extending drinking water service to Renaissance High School. This or another long-term solution project would also be eligible for state grant funds if it benefits an income qualifying population. The district might also consider other long-term solution options including installing a treatment system for chromium-6 on the school's well.

7. How many additional PVUSD schools have chromium-6 in their drinking water supply?

Community Water Center has researched the extent of chromium-6 in all PVUSD schools via Consumer Confidence Reports and the State Drinking Water Watch online searchable public database (https://sdwis.waterboards.ca.gov/PDWW/). We have also met with the City of Watsonville to better understand the extent of chromium-6 in their water system - 6 of the City's 12 wells have chromium-6 above 10 ppb. Because of mixing of water from different wells, it is not known at this time which and how many schools within city limits might be impacted.

Four PVUSD schools are served by Soquel Creek Water District (Aptos Junior, Mar Vista, Rio del Mar, and Valencia). Aptos High has its own water system that does not have chromium-6. Soquel Creek Water District reported that, similar to the City of Watsonville, the water district is unable to provide any information about the extent of the contaminant in schools because it is only present in some, but not all of the wells. The Soquel Creek Water District's 2017 Consumer Confidence Report indicates levels of chromium-6 at levels between non detect and 7.9 (https://drinc.ca.gov/ear/CCR/CCR2017CA4410017.pdf).

8. Why are Ohlone Elementary and Renaissance High eligible for emergency bottled water?

During community meetings in north Monterey County about drinking water issues at the homes of residents, concerned parents of children at Ohlone Elementary continue to raise safe water issues in the school as a top priority. The State Water Resources Control Board has indicated that both Ohlone Elementary School and Renaissance High School qualify for the state-funded emergency bottled water because both schools have chromium-6 over 10 ppb. We are committed to working with PVUSD to ensure that all district schools have access to safe and affordable drinking water by advocating for emergency and long-term solutions.

9. What is needed for the CAA Urgent Drinking Water Needs Program funding application?

It is a 2-page application. The school district, a non-profit organization, or a water system could be the grant applicant and/or grant administrator. The applicant would need to show that both schools are working on a long-term solution for the chromium-6 contamination, as this emergency funding program is only for 3 years maximum. More information here: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/caa/urgent_water_needs.html

As of October 2019, the State Water Resources Control Board indicated that they are moving away from their grant program that funds individual schools and that they are establishing a statewide bottled water program with a statewide technical assistance provider (the Rural Community Assistance Corporation). Ohlone Elementary and Renaissance High School are eligible to receive emergency bottled water through this program.

10. What is the quality of bottled water delivered in 5-gallon refillable bottles to Pajaro Valley Unified School district?

PVUSD contracts with a water vendor that sources their bottled water from the Castroville Community Services District (CSD), which is a public water system regulated by the State Water Resources Control Board. The Castroville CSD's 2018 Consumer Confidence Report is available online: http://www.castrovillecsd.org/files/131576591.pdf. More information and

previous CCRs can be found on the CSD's website: http://www.castrovillecsd.org/Clean-Drinking-Water-Castroville-CA.html .

11. How can I get information about the water quality of bottled water?

Similar to tap water, you must first find out whether the bottling company gets its water from a public water system or another source (e.g. spring, stream, well). If the bottling company gets their water from a public water system, then that public water system must meet all public water system requirements including providing an annual water quality report to customers, or CCR.

In addition, you can request a bottled water report from any company licensed to provide bottled water for sale and distribution in California. This report must include the source of the bottled water, the treatment process, and the water quality analyses of the treated water. Although all bottled water companies must have a license from California Department of Public Health's Food and Drug Branch, there are fewer legal requirements for testing bottled water to ensure that it is safe than there are for water from public water systems. For more information on bottled water and monitoring requirements, please see this website: https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/WaterFAQs.aspx

Please contact **Community Water Center at (831) 288-0450** for any further questions and information.