



Frequently Asked Questions about New Chromium-6 Standards & Potential Impacts to Water Supply

New tough State of California drinking water regulations coupled with one of the driest years in California's recorded history has compelled the Santa Ynez River Water Conservation District (ID No. 1) Board of Trustees to take emergency measures to protect ID No.1's water resources.

Typically ID No.1 would meet water needs despite the dry conditions by using stored groundwater supplies to make up for the shortfall. However, the new State health standard for Chromium-6, a naturally occurring element found in local groundwater supplies, now restricts ID No. 1's ability to use certain wells. This creates an unprecedented constraint on groundwater supplies, and production has now been reduced by half because of the new standards.

Providing our customers with reliable, high quality drinking water that meets the State standards remains the top priority at ID No. 1. We encourage our customers to learn more about Chromium-6 and the new State regulations and to do everything they can to help us conserve water.

CHROMIUM Basics

What is Chromium?

Chromium is an odorless and tasteless metallic element, listed in the Periodic Table, and found naturally in rocks, ore, soil and volcanic dust, plants, humans, and animals. Chromium in this region area enters the groundwater through geologic formations, specifically in Serpentine which is commonly found throughout California (the State Rock) and locally in the San Rafael Mountain Range.

The most common forms of Chromium that occur in natural waters in the environment are Trivalent Chromium (Chromium-3), and Hexavalent Chromium (Chromium-6).

Chromium-3 occurs also naturally in many vegetables, fruits, meats and grains, and in yeast. It is an essential nutritional element for humans and is often added to vitamins as a dietary supplement. In the Santa Ynez area, Chromium-6 occurs from erosion of those natural Chromium deposits within the rock formation and soil.

Are there regulations in place that limit the amount of Chromium-6 allowed?

The State just passed new rules severely reducing the amount of Chromium-6 that is deemed acceptable in California drinking water.

Previous State standards required drinking water to contain no more than 50 parts per billion of Chromium. As of July 1, new standards reduced the limit to no more than 10 parts per billion for Chromium-6 – an 80 percent reduction beyond the current standard.

The Federal government standard for Chromium remains 100 parts per billion. That means the new State regulation is ten times tougher than the Federal limit.

Does my water meet the State's new standard for Chromium-6?

Water delivered to ID No. 1 customers meets State standards. Public health and safety is a top priority and ID No. 1's drinking water has always met State requirements. ID No. 1 has been proactive in assuring the new standards are met by suspending water production from its Upland groundwater wells that exceeded the 10 parts per billion. ID No. 1 is currently reviewing additional actions that could bring these wells into compliance and back into production.

How will these new regulations impact the region's water supply?

ID No.1 has already suspended use of its Upland wells where Chromium-6 levels have been found to be in excess of the new State standard. Losing the use of those wells has cut the available groundwater supply by about half, placing additional pressures on our already reduced water supply.

THE DROUGHT IS EXACERBATING THE SITUATION, MAKING WATER TREATMENT MORE DIFFICULT AND MORE EXPENSIVE

How is the drought making this situation worse?

The drought is exacerbating the situation, making water treatment more difficult and more expensive. Typically, we would reduce Chromium levels in drinking water simply by blending it with surface water, which does not contain Chromium. However, the drought has severely reduced the amount of available surface water, making it impossible to dilute Chromium-6 levels to the new standards simply by blending.

As of August 1, the prevailing drought conditions have left Lake Cachuma's deliverable water at 19 percent of the total water supply capacity. On October 1, 2014, a 55 percent reduction in deliveries will begin placing additional constraints on local water supplies. ID No. 1's overall water production profile is about half of what is typical in a year with normal rainfall and water supplies.

How is ID No.1 planning to comply with the new State standards during the drought?

We have already shut down the Upland groundwater wells that were found to have Chromium-6 levels in excess of 10 parts per billion. We are also urging customers to reduce water use by at least 20 percent, which would help maximize the amount of usable water available to meet customer demand during the peak season and extend this resource in the event of a prolonged drought period.

In addition, ID No. 1 has hired outside experts to assess the situation and identify potential actions that would enable ID No. 1 to meet water quality and supply needs. Many of the options involve investing in new treatment facilities, enabling ID No. 1 to comply with new standards and maintain water supply reliability going forward.

What will this cost?

The costs associated with new treatment facilities vary, but ID No. 1 may be forced to spend as much as \$25 million on new treatment facilities. Complying with new State drinking water standards could collectively cost California's public water agencies as much as \$616 million. In the face of this unprecedented drought and in years to come, it will be increasingly important to access the water from our Upland wells, but doing so may require the construction of expensive new treatment facilities.

What will this mean for the availability of safe, reliable water?

It means everybody must do their part to conserve as much water as possible as ID No. 1 works to find solutions to cope with both the new State regulations and the third driest year in the State's recorded history. It also means further conservation actions may be necessary to ensure we are all doing everything we can to save our precious water.

ID No. 1 will continue to meet its core needs for drinking water and sanitation purposes to ensure the health and safety of our customers. But the continuing pressures due to drought and the Chromium-6 regulatory requirements might mean agricultural customers could see their water service interrupted pursuant to the Rules and Regulations unless everyone does their part to conserve and manage water use effectively.

FURTHER ACTION AND TIGHTER RESTRICTIONS ON THE HORIZON

What actions has ID No.1 already taken?

Reliable and high quality drinking water is our top priority, and ID No. 1 has been doing everything it can to ensure your water meets the most rigorous public health safety standards. We began aggressively testing all of our Upland groundwater wells, even before the new State regulations went into effect, and are months ahead of other water districts around the State. In June, the ID No.1 Board of Trustees declared a Water Shortage Emergency and as Stage 1 water supply shortage, asking customers to cut their water use by at least 20 percent. We have also restricted outdoor watering, and placed limits on hosing down outdoor hardscapes like driveways and sidewalks.

ID No.1 is in the midst of an aggressive campaign to inform the public about the new State standards and the seriousness of the drought, and what it means for our domestic and agricultural customers. Because of the drought conditions, ID No.1 has also made every effort with our local representatives, State legislators, and the Governor's office to seek assistance with extending the timing of Chromuim-6 regulatory standards as well as exploring funds for these upcoming treatment expenses to meet these new standards.

What can I do to help?

We need everyone do their part to conserve water. Under the State Water Resources Control Board approved new statewide emergency regulations and ID No. 1's Stage 1 action, customers must immediately:

- Stop washing down driveways and sidewalks
- Stop watering of outdoor landscapes that cause excess runoff
- Stop using a hose to wash a motor vehicle, unless the hose is fitted with a shut-off nozzle
- Stop using potable water in a fountain or decorative water feature, unless the water is recirculated

ID No. 1 is urging all residents to comply with California's new mandatory conservation measures.

For more information on the regulation adopted by the State Water Board, please visit the Emergency Water Conservation website. More information about Chromium and the new State standards is available from the State Department of Public Health and on the District's website, <http://www.syrwd.org/>.