

FACT SHEET

Perchlorate

What is perchlorate?

Perchlorate salts are used for rocket fuel, highway flares, fireworks, matches, air bag inflators and other uses. Perchlorate has also been found to occur naturally in areas receiving little or no rain.

Does perchlorate pose a health risk?

Perchlorate can interfere with iodine uptake in the thyroid gland, which can affect hormones that regulate metabolism and growth. Perchlorate is therefore considered to have adverse effects when present above allowable levels. Water containing perchlorate above allowable levels should not be used for drinking or cooking.

What is the allowable level of perchlorate in drinking water?

As of October 2007, perchlorate is a regulated drinking water contaminant in California. The maximum contaminant level for perchlorate is 6 micrograms per liter ($\mu\text{g/L}$), or parts per billion (ppb). Public water systems are required to monitor water quality and to take action to ensure water delivered to consumers meets drinking water standards for all regulated contaminants, including perchlorate.

In January 2011, the state proposed changing the public health goal (PHG) from 6 ppb to 1 ppb. While the public health goal is not an enforceable drinking water standard, it provides scientific guidance in reviewing the existing state drinking water standard of 6 ppb. The district will continue to monitor any proposed changes to the state drinking water standard.

How has perchlorate affected drinking water in Santa Clara County?

A former flare manufacturing facility in Morgan Hill owned by the Olin Corporation used an unlined evaporation pond to dispose of perchlorate wastes over many decades. The perchlorate leached through the soil into groundwater over time, creating a plume extending southeast from Morgan Hill that affected hundreds of private wells and several municipal water wells.

What is the water district doing about perchlorate?

Upon learning of the contamination and in response to the community's concerns, the water district provided water quality testing and bottled water to more than 1,000 private well owners in 2003. The district has supported investigations by the Central Coast Regional Water Quality Control Board (the agency directing cleanup efforts) by providing technical information and review.

In 2007, the district completed a grant-funded study to evaluate using additional groundwater recharge to reduce perchlorate contamination. The district also received grant money to identify perchlorate sources and background levels, but this study will not be completed since declining perchlorate concentrations in wells make this expenditure unnecessary. The district is pursuing grant funds to enhance recharge facilities in Morgan Hill, which is expected to further dilute perchlorate in groundwater. The district continues to participate in the Perchlorate Community Advisory Group and will be engaged in any state process related to proposed changes to the drinking water standard.

What is the status of the cleanup?

At the urging of the district and the community, the Central Coast Regional Water Quality Board (Regional Board) has taken action to ensure the timely restoration of contaminated groundwater. The Olin Corporation began soil remediation and groundwater treatment on the Tennant Avenue site in 2004. Since that time, the Regional Board has directed Olin to perform groundwater extraction and treatment to address the perchlorate plume. Perchlorate levels have decreased significantly and the size of the plume is decreasing. However, a few wells still contain perchlorate above the state drinking water standard and remediation is ongoing. The district tracks the cleanup progress by reviewing the monitoring reports and remediation plans submitted to the Regional Board.

Do I need to test my water for perchlorate?

The cities of Morgan Hill and Gilroy regularly test their wells for perchlorate to ensure water delivered to consumers meets all drinking water standards. The district encourages private well owners to test their well water annually, or more frequently if there is a change in taste, odor, or appearance. A list of certified laboratories is available on the district website at www.valleywater.org.

Contact us

For information on cleanup status, please contact the Central Coast Regional Water Quality Control Board at **(805) 549-3147**.

For general groundwater information, please contact Behzad Ahmadi of the Santa Clara Valley Water District at **(408) 265-2607, ext. 2324**.