

Does your drinking water taste or smell funny?

Drinking water imported from the Sacramento-San Joaquin Delta or captured as rainfall in local reservoirs can occasionally have noticeable taste and odor, depending on the time of year or the source of the water coming into our treatment plants. The predominant tastes and odors are musty or earthy (caused by algae), "salty" (caused by high salinity levels), or "rotten-egg" (caused by a lack of oxygen). The "swimming pool" taste or odor encountered in drinking water is caused the chlorine used in the disinfection process. All of our tap water meets federal and state standards for safety.

Chlorinous

During the treatment process, chlorine is added to the water as a disinfectant. Before the water leaves the treatment plant, ammonia is added and combines with the chlorine to form chloramines; this keeps the water disinfected while it is distributed to homes and businesses.

Chloramines, rather than chlorine, are used to maintain a disinfectant residual because they are more stable, form fewer disinfection by-products, and tend to produce less offensive tastes and odors. However, they may impart chlorinous or medicinal taste and odor to your drinking water.

Musty or earthy

Earthy or musty tastes and odors, particularly in hot water, are often the result of an algal bloom in the untreated water supply. Algae thrive when water is warm and there is abundant sunlight. Thus, taste- and odor-producing algae typically bloom in the late summer or fall.

Although the Santa Clara Valley Water District's modern treatment plants remove the algae, some of their taste- and odor-causing metabolites may remain. The two most common metabolites are geosmin and 2-methylisoborneol (MIB). Even



though these compounds are harmless, the human senses of taste and smell are extremely sensitive to them and can detect them in the water at concentrations as low as 5 parts per trillion.

Rotten egg

A rotten-egg smell typically occurs from a lack of oxygen in reservoirs, lakes and wells. It is caused by bacterial decomposition of algae and organics which, when no oxygen is present, produces hydrogen sulfide. Hydrogen sulfide emits a rotten-egg smell. The district's treatment process re-oxygenates the water and removes the rotten-egg odor. Although unlikely, some residual odor may remain.

Salty

About half of the water used in the county originates hundreds of miles away in the Sierra Nevada and is delivered through the Sacramento-San Joaquin River Delta or San Francisco's Hetch-Hetchy system. Most of the remainder comes from local rainfall, much of which is captured in the water district's 10 local reservoirs. Some areas of the county rely on groundwater.

[continued on back »](#)

When California experiences a drought, salinity levels in the Delta typically increase, sometimes significantly. This may result in a very slight salty taste in your tap water.

Other

You may occasionally notice other common odors in your tap water such as fishy, grassy or marshy. These are also caused by compounds produced by different types of algae. Although these compounds may impart an odor, they do not adversely affect the safety of your drinking water.

Monitoring and treatment

In addition to weekly laboratory analyses which measure the concentrations of taste- and odor-causing compounds, the district has a Flavor Profile Analysis (FPA) panel that meets on a regular basis. The FPA panel consists of a group of persons trained to identify flavors and/or aromas in untreated source water and treated drinking water.

The district's current methods for the removal of taste and odor include the use of powdered activated carbon, ozone and peroxone (a combination of ozone and hydrogen peroxide). The district's Penitencia and Santa Teresa water treatment plants currently have ozone and peroxone systems. The district's third and oldest treatment plant, Rinconada, is undergoing major upgrades, including the installation of an ozone system, which will significantly improve the tap water produced at this plant.

What We Do

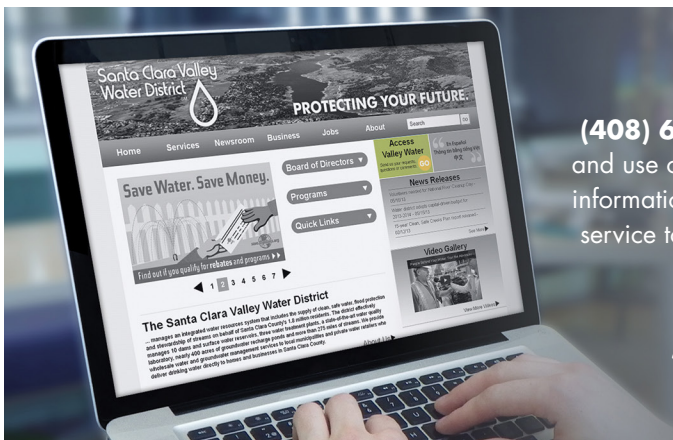
The Santa Clara Valley Water District manages an integrated water resources system that includes the supply of clean, safe water, flood protection and stewardship of streams on behalf of Santa Clara County's 1.8 million residents. The district effectively manages 10 dams and surface water reservoirs, three drinking water treatment plants, an advanced recycled water purification center, a state-of-the-art water quality laboratory, nearly 400 acres of groundwater recharge ponds and more than 275 miles of streams.

We provide wholesale water and groundwater management services to local municipalities and private water retailers who deliver drinking water directly to homes and businesses in Santa Clara County.

Contact Us

For general information about water quality, contact Water Quality Unit Manager **Bruce Cabral** at **(408) 630-2796**, or **bcabral@valleywater.org**.

For specific questions regarding your tap water, contact your water service provider. If you're not certain who provides your water, you can find out here: <http://www.valleywater.org/Services/WaterRetailers.aspx>



CONTACT US

For more information, contact **Bruce Cabral** at **(408) 630-2796**, or visit our website at valleywater.org and use our **Access Valley Water** customer request and information system. With three easy steps, you can use this service to find out the latest information on district projects or to submit questions, complaints or compliments directly to a district staff person.



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