VOC
VOLATILE ORGANIC COMPOUNDS & DRINKING WATER FAQ SHEET

What are Volatile Organic Compounds?

Volatile organic chemicals, otherwise known as VOCs, are carbon-containing compounds that evaporate easily. VOCs are used in a wide variety of human activities such as chemical manufacturing, oil production, and the application of certain pesticides. The US Environmental Protection Agency (US EPA) and the California State Water Resources Control Board (SWRCB) has established Maximum Contaminant Levels (MCLs) for inorganic and organic contaminants in drinking water.

Quick Links:

- List of MCLs
- List of Certified Laboratories
- Ventura County Environmental Health Division, Drinking Water Program
- SWRCB
- US EPA

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How can VOCs get into my drinking water?

VOCs found in the environment may be naturally occurring, but may also be caused or magnified by human activities. When VOCs migrate underground to nearby wells, they can eventually end up in drinking water supplies. Certain factors may increase the likelihood that a water supply will be contaminated. For example, wells contaminated with VOCs may be located near active or historic oil fields, industrial factories, gas stations, or landfills.

What are the health risks associated with VOCs in drinking water?

Different chemicals produce different health risks. Depending on type, dose, and exposure, VOCs vary considerably in their toxic (or harmful) effects. Information on health effects associated with VOC's can be found in California Code of Regulations Tittle 22 Section 64465(E)

How do I know if my drinking water well is contaminated with VOCs?

Private well owners should have their water tested by a state-certified laboratory.

List of Certified Laboratories: https://tinyurl.com/kynxg6d

What do I do if my water tests show there are VOCs present?

Water containing VOCs at levels below the EPA-established MCLs is considered safe to drink. However, some individuals whose water has been found to contain VOCs or other contaminants at low levels may make a personal choice to either 1) stop drinking their water and connect to a public water purveyor since they are strictly monitored and regulated, or 2) investigate treatment options.

List of MCLs: https://tinyurl.com/ln42ur4

What can I do to remove VOCs from my drinking water?

There are home water treatment systems available which can remove or reduce organics chemicals, such as Granulated Activated Carbon filter systems and Packed Tower Aeration systems. Treatment systems should be third party certified.

For example, units with NSF/ANSI 53 approval are designed to reduce specific health-related contaminants, such as Cryptosporidium, Giardia, lead, and VOCs that may be present in public or private drinking water. It is important to test the raw water first to determine exactly what contaminants are present before choosing a treatment system. Treatment systems should be installed by a competent individual, and properly maintained and tested to ensure they are operating properly.

Where can I find out more about VOCs and private water wells?

Environmental Health Division, Drinking Water Program: https://tinyurl.com/ldfg76y

SWRCB: https://tinyurl.com/kuxjrye

US EPA: https://www.epa.gov/privatewells

County of Ventura Environmental Health Division
800 S. Victoria Ave. Ventura, CA 93009
vcrma.org/divisions/environmental-health