

# Facts About Wastewater Treatment Plants

A wastewater treatment plant is a facility where steps are taken to remove human waste, food, certain soaps, and detergents from used water.

Wastewater travels through sewer pipes to treatment plants where it goes through a process to clean it. Water quality tests are done at laboratories to make sure they meet all health requirements of the State of California Los Angeles Regional Water Quality Control Board. The state also monitors residential areas near wastewater facilities to prevent contamination. Once the water goes through the treatment process, it is either returned to the ocean, storage reservoirs, or used to water land.



Modern wastewater treatment facilities have been designed to cover water that is being treated to reduce odors in the area. Facilities with older designs are uncovered and are more likely to release bad odors. When equipment from older facilities isn't working correctly or if a serious accident occurs at the wastewater treatment facility, workers and people who live nearby may be exposed to strong odors and potential short-term health effects.

## **ODORS NEAR WASTEWATER TREATMENT FACILITIES**

Wastewater treatment odors are caused by sewage processing. Hydrogen sulfide is a common chemical that can be released into air, water, and soil nearby. It gives off a smell like rotten egg, ammonia, or garlic. It can stay in the air from 1 to 42 days or longer when the weather is warm and dry. People who work at or live near natural or industrial sources like a wastewater treatment plant, a gas and oil drilling operation, a landfill, a farm with manure storage or livestock can be exposed to more hydrogen sulfide than the general population.

Environmental chemists use units that look at the amounts of toxic chemicals in the air and water samples. They have found that no bad health effects are expected when the level of hydrogen sulfide is below 7 parts per billion (ppb) in the air, even when there are long-term exposures. The concentration units' parts per billion are used when dealing with very weak solutions.

Most people smell hydrogen sulfide at low levels in the air ranging from 0.5 to .30 ppb.

## HEALTH EFFECTS

The health effects of hydrogen sulfide depend on how much you breathe, for how long, whether other chemicals are present, and your personal traits and habits. Hydrogen sulfide has not been shown to cause cancer in humans.

### Exposure to low levels of hydrogen sulfide may cause:

- Irritation of the eyes, nose, and throat
- Trouble breathing if you have asthma or other respiratory illness
- Headaches
- Poor memory
- Tiredness
- Balance problems

### Brief exposure to high levels of hydrogen sulfide while working in enclosed spaces with minimum ventilation may cause:

- Loss of consciousness without any other side effects
- Some individuals may have permanent or long-term effects such as:
  - Headaches, poor attention span, poor memory, and decreased motor function

Bad odors can be a bother that may cause physical and mental health effects. If you are having health symptoms due to the air quality, speak with your doctor to let them know your concerns.

- If you don't have a doctor, call the Los Angeles County My Health LA Program at 1-844-744-6452, Monday-Friday between 7:30 AM and 5:30 PM, to find a clinic near you; or visit [www.dhs.lacounty.gov/mhla](http://www.dhs.lacounty.gov/mhla)

## WHAT CAN I DO TO PROTECT MYSELF?

- Use a portable indoor air cleaner or purifier such as a High Efficiency Particulate Air (HEPA) cleaner with a carbon (or activated carbon) filter to improve air quality in your home. For more information on certified air filters, check EPA's Air Cleaners and Air Filters webpage, <https://www.epa.gov/indoor-air-quality-iaq/air-cleaners-and-air-filters-home>.
- If you have a central heating, ventilation, and air conditioning (HVAC) system, find out if the air filters in your system may be replaced with High Efficiency Particulate Air (HEPA) or MERV-rated filters with activated charcoal (carbon) to improve the air quality inside. Check it to see if the filter is dirty and needs to be replaced at least once a month.
- Air out your home when odors are not present by temporarily opening windows and doors.
- Contact your doctor if you are experiencing health symptoms.
- Report bad odors.



## WHERE DO I REPORT BAD OUTDOOR ODORS?



Environmental issues are managed by different regulatory agencies with different roles and responsibilities. The South Coast Air Quality Management District (AQMD) is responsible for regulating outdoor air quality in Los Angeles County. They offer different ways to report an issue:

- Call: 1-800-CUT-SMOG (1-800-288-7664) or Email: [cut\\_smog@aqmd.gov](mailto:cut_smog@aqmd.gov)
- Submit a complaint online: <https://www.aqmd.gov/home/air-quality/complaints>

## WHERE DO I REPORT BAD INDOOR ODORS?

If you smell bad odors inside your home, contact the Department of Public Health, Environmental Health at (626) 430-9820, from 8:00 am to 5:00 pm, Monday through Friday.