



Dominguez Channel Odor FAQ

Updated October 9, 2021

What is that smell?

The “rotten egg” smell is believed to be hydrogen sulfide.

What is hydrogen sulfide?

According to the National Institutes of Health: “Hydrogen sulfide (H₂S) occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. It can also result from bacterial breakdown of organic matter. It is also produced by human and animal wastes. Bacteria found in your mouth and gastrointestinal tract produce hydrogen sulfide from bacteria decomposing materials that contain vegetable or animal proteins. Hydrogen sulfide can also result from industrial activities, such as food processing, coke ovens, kraft paper mills, tanneries, and petroleum refineries. Hydrogen sulfide is a flammable, colorless gas with a characteristic odor of rotten eggs. It is commonly known as hydrosulfuric acid, sewer gas, and stink damp. People can smell it at low levels.” - <https://pubchem.ncbi.nlm.nih.gov/compound/hydrogen-sulfide>

Hydrogen sulfide can be detected by smell at concentrations as low as 0.5 ppb (parts per billion).

Where is it coming from and who is responsible?

According to Los Angeles County Public Works:

County of Los Angeles officials are working to address reports of an unpleasant odor that began earlier this week in the vicinity of the Dominguez Channel in the City of Carson. The channel is maintained by Los Angeles County Public Works and provides flood protection for the local community.

A team from Los Angeles County Fire, the Los Angeles County Department of Public Health, LA County Public Works and the Air Quality Management District are investigating the channel at the intersection of South Avalon Blvd. in Carson. Local officials are working to identify the source of the odor and will keep local residents and agencies informed.

Is it dangerous?

Depending on the concentration levels, hydrogen sulfide can be dangerous to your health. The OSHA ceiling (the maximum airborne level that should not be exceeded in a workplace) is 20 (parts per million) while NIOSH considers 100 ppm to be immediately dangerous to life or health.

However, even low concentrations of H₂S can cause headache, dizziness, nausea, and vomiting. For more information, see this Centers for Disease Control and Prevention document on Medical Management Guidelines for Hydrogen Sulfide - <https://wwwn.cdc.gov/TSP/MMG/MMGDetails.aspx?mmgid=385&toxid=67>.

What is the concentration level that we are experiencing?

According to Los Angeles County Public Health:

Public Health conducted air monitoring over the last two days and found very low levels of hydrogen sulfide in the air (0.4-0.9 ppm) east of the Dominguez Channel. At these low levels, hydrogen sulfide does not have long-term health effects, but does cause nuisance odors that may cause short-term symptoms and impact quality of life. Some residents may experience temporary symptoms such as headaches, nausea, or eye, nose, and throat irritation. Symptoms should go away when the odors are no longer present.

If residents are experiencing persistent symptoms from the odors, they are encouraged to contact their health care providers, especially if they have any chronic health conditions. Residents should also ensure that they have adequate supplies of their medications, especially if they have heart or lung conditions.

Local officials are continuing to work to identify the source of the odor, however until the odor event subsides, Public Health recommends preventing outdoor odors from entering the home by keeping doors and windows closed while odors are present. Public Health also recommends using an air conditioner, if available. Residents can also use a portable indoor air filter such as a High Efficiency Particulate Air (HEPA) cleaner to improve air quality in their home. For more information on certified air filters, visit <https://ww2.arb.ca.gov/our-work/programs/air-cleaners-ozone-products/california-certified-air-cleaning-devices>.

In addition, residents should continue to call AQMD to report odors. 1-800-CUT-SMOG (1-800-288-7644).

For assistance with health protective measures, please leave a message on the Public Health Community line 1-626-430-9821.

Due to the requirement for refineries to have community fence-line air monitors, the Marathon refinery has two air monitors (sites B and E) located near the channel that can give you an idea of what H₂S concentration levels are nearby. You can check the air monitors in real-time at this link: <https://www.marathonlosangelesrefineryfencelinemonitoring.com/monitors.html>

What has the City been doing about this?

The City of Carson first reported this concern to the South Coast AQMD on Monday, October 4, 2021. Since then, city officials have been in daily contact with AQMD officials as well as Los Angeles County officials and departments. We have requested the responsible agencies to release their findings and to issue public statements related to the investigation and effects to the health and safety of Carson residents. Protecting the health, safety, and welfare of Carson residents is the highest priority of the City Council.

What can I do about this?

You can report air quality concerns and complaints to AQMD by calling **800-CUT-SMOG (288-7664)**. Issues related to Dominguez Channel should be reported to the Los Angeles County Public Works at **562-861-0316**. Public and environmental health concerns can be reported to the Department of Public Health at **626-430-9821**.

When odors are present, follow the advice from Public Health above to limit your exposure.

Please also share this information with neighbors, friends, and family who may be affected by the odor.