



## UPDATED COMMUNITY NOTICE – 11/19/2021

### Los Angeles County's Response to Odors Reported in the City of Carson

The Los Angeles County Department of Public Health (Public Health) is issuing the following updated guidance for those that may have been impacted by foul odors coming from the Dominguez Channel.

#### STATUS UPDATE

The reported 1-hour average H<sub>2</sub>S levels at all local South Coast AQMD community air monitors have been substantially below the current California Ambient Air Quality Standard for hydrogen sulfide (H<sub>2</sub>S) for at least 12 consecutive days, except at the 213th/Chico monitor. The California standard for hydrogen sulfide (H<sub>2</sub>S) is 30 parts per billion (ppb) for a 1-hour average. Levels detected at the 213<sup>th</sup>/Chico monitor continue to improve. For the last three days (11/16 through 11/18/2021), its reported average 1-hour H<sub>2</sub>S levels have also been below 10 ppb.

To view near real-time data from South Coast AQMD's air monitoring system, as well as past data, please visit their [Rule 1180 Community Air Monitoring webpage \(https://bit.ly/3bWhucc\)](https://bit.ly/3bWhucc). For information on other air monitoring investigations related to the Dominguez Channel, see their [Dominguez Channel Odor Event](#) website.

The H<sub>2</sub>S standard was adopted by the California Air Resources Board (CARB) for the purpose of odor control. Per CARB, H<sub>2</sub>S is regulated as a nuisance based on its odor detection level. If the standard were based on adverse health effects, it would be set at a much higher level.

The source of the H<sub>2</sub>S continues to be considered as naturally decaying organic material (vegetation and marine life) at the bottom and sides of the Channel in Carson. The levels of H<sub>2</sub>S detected inches above the Channel at multiple locations continue to remain significantly decreased. Public Works continue to take actions to restore the conditions in the Channel. As air monitoring of the surrounding areas continues, no other point sources for the hydrogen sulfide have been identified. The South Coast Air Quality Management District (AQMD), County Fire Hazardous Materials (HazMat), and Public Health continue to evaluate and monitor hydrogen sulfide levels and recommend actions to mitigate potential health impacts, based on the levels detected.

Los Angeles County Public Works continues to implement the following strategies to address the odor (smell) of hydrogen sulfide from the Dominguez Channel in the City of Carson:

1. Neutralizing the odor by applying a natural, water-based, and biodegradable odor neutralizer to remove the odor (the smell) coming from the Channel. The odor neutralizer does not mask the odor; it traps the hydrogen sulfide by turning it into a salt.
2. Aerating (adding oxygen to) the wastewater, similar to a fish tank, to increase the level of dissolved oxygen in the channel wastewater and prevent the production of excessive hydrogen sulfide gas within the Channel.

#### RECOMMENDATIONS

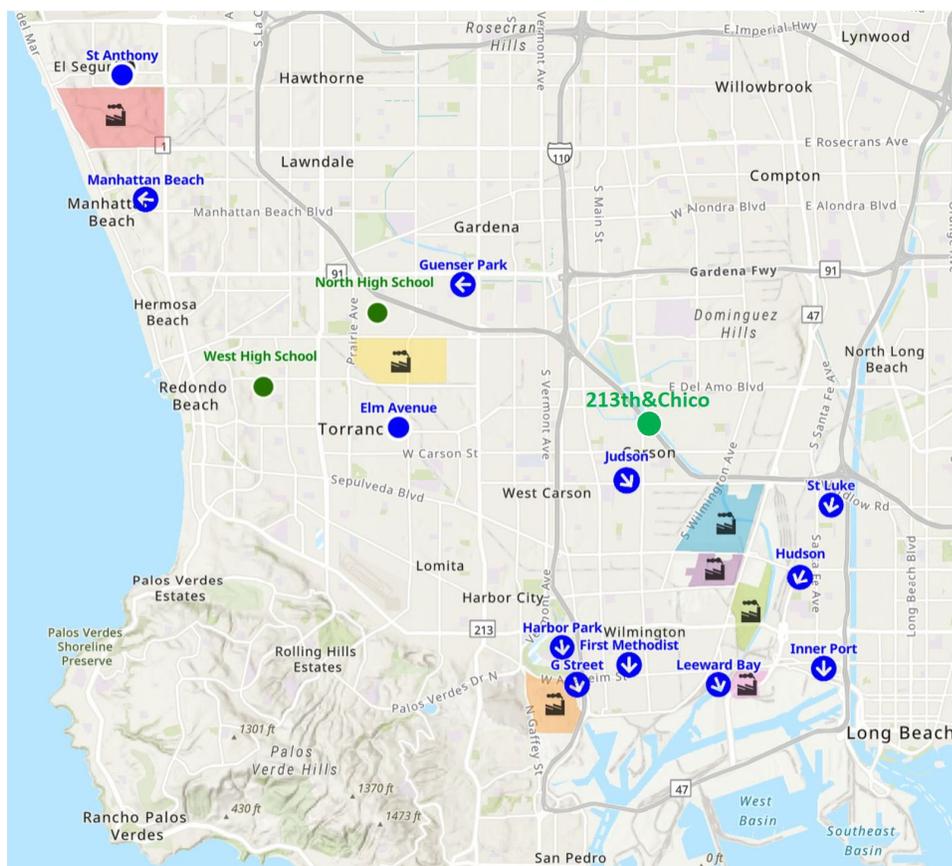
1. **Check the community air monitoring readings for hydrogen sulfide levels nearest your home.** South Coast AQMD also has 12 fixed air monitors, plus one temporary monitor, located throughout the community as part of its Rule 1180 Refinery Fenceline and Community Air Monitoring Program (see map below). To view near real-time data from South Coast AQMD's air monitoring system, as well as past data, please visit their [Rule 1180 Community Air Monitoring webpage \(https://bit.ly/3bWhucc\)](https://bit.ly/3bWhucc).

It is important to note that odors may come and go, even if the hydrogen sulfide levels are below the Air Quality Standard of 30 ppb. Some can even smell hydrogen sulfide in the air at levels as low as 0.4 ppb. Hydrogen sulfide occurs both naturally and from human-made processes. Hydrogen sulfide is associated with municipal sewers and sewage treatment plants, gas and oil drilling operations, farms with manure storage or livestock confinement facilities, and landfills. For more information on hydrogen sulfide, read the



Agency for Toxic Substances and Disease Registry’s Hydrogen Sulfide – ToxFQA’s, which answers the most frequently asked health questions (FAQs) about hydrogen sulfide.

If you notice “rotten egg” or “sulfur” odors, you can continue to report them online with South Coast Air Quality Management District at <http://www.aqmd.gov/home/air-quality/complaints>, or by telephone at 1-800-CUT-SMOG (1-800-288-7664).



2. **Residents who temporarily relocated should review the *Preparing to Return Home Tip Sheet*** and take steps now to prepare for returning home. Before returning home to stay, follow the steps in the Tip Sheet to air out any odors that may have accumulated inside your home during your absence.
3. **If any foul odors are present outdoors**, close your windows and doors. Take the following actions to lessen any symptoms experienced and to protect the health of you, your family, and your pets:
  - a. *Pay attention to your health when the odor is present.*
    - a. If you have any symptoms that feel life threatening, seek immediate medical care.
    - b. People experiencing persistent, worrisome, or worsening symptoms from the odors are encouraged to contact their health care providers, especially if they have any chronic health conditions. People should also ensure that they have adequate supplies of their medications, especially if they have heart or lung conditions. In addition, Public Health recommends temporarily leaving the area where odors are present to alleviate symptoms if they occur.
  - b. *Avoid prolonged outdoor activities whenever outdoor odors are strong* to reduce your exposure.
  - c. *Prevent outdoor odors from coming indoors.* Keep doors and windows closed as much as possible to prevent outdoor odors from entering your residence or business. Air out your home/business when odors are not present.
  - d. *Improve the air quality inside your home or business.* This can be done using your central HVAC system or portable indoor air purifiers while your doors and windows closed.



- a. If you have a central heating, ventilation, and air conditioning (HVAC) system, contact an air conditioning specialist, if needed, to determine 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.
  - b. Use a certified portable HEPA indoor air filter with activated charcoal to improve air quality in your home. See some examples of portable HEPA indoor air filters with activated carbon below or on the reverse side for consideration.
  - e. *Monitor your pets for symptoms.* Keep pets indoors when odors are present outside. If you notice any of the following in your pets, please contact your local veterinarian: difficulty breathing, vomiting, lethargy, or nausea.
- 4. For businesses that may be impacted by the foul odors,** if you notice strong odors inside your building when opening in the morning, Public Health recommends businesses run their air-conditioning units 1-2 hours, if possible, before on-site operations begin. Doing so will increase air flow inside your business and help reduce any odors present that may have built up overnight.

*For more information on protective measures to prevent odors from entering the home or if you continue to experience symptoms due to odors after taking steps to improve the air quality in your home, please contact the Public Health Community line at 626-430-9821 and leave a message with your contact information. Your call will be returned. The message line will be checked every hour between 7 a.m. to 10 p.m. every day*

**ARE THE ODORS HARMFUL TO MY HEALTH?**

Hydrogen sulfide is a colorless gas that has a very strong odor (like “rotten egg”). Its smell can be noticed and cause temporary mild to moderate symptoms well below the detection limit on typical equipment [1 part per million (ppm) or 1000 parts per billion (ppb)]. Everyone should take steps to reduce their exposure when the odors are present. The health effects of hydrogen sulfide can vary depending on the level and duration of exposure. The levels detected, thus far, are not expected to cause irreversible health effects. They have been high enough to cause a strong, foul odor in the community, which in some cases can lead to headaches and irritation in the eyes, nose, throat, and lungs. These symptoms may be accompanied by dizziness, nausea/vomiting or abdominal discomfort. These symptoms should be short-term and typically resolve when the odor goes away or when the person is in an area where the odors are not present. Symptoms can be worse in people with pre-existing lung or heart conditions, such as asthma, COPD, or heart disease. If symptoms are persistent, worrisome, or worsening, seek medical attention and take steps to reduce exposure to the odors or temporarily relocate to another area until the odors go away.

**REIMBURSEMENT PROGRAM**

**If you live in in the areas of Carson, West Carson, or the surrounding vicinity,** County Public Works continues to offer a reimbursement program. Be sure to review the County’s terms and reimbursement rates for air filters, air purifiers, and relocation costs for the County’s reimbursement program on the following website: <https://dpw.lacounty.gov/general/eforms/SimpleWorkflow/522.aspx>. Also, review the recommendations and guidance on “Air Cleaners and Filters to Improve Indoor Air Quality and Remove Odors” below before purchasing filters. Visit <https://lacounty.gov/emergency> for more information on the reimbursement program.

To submit requests for reimbursement, you may click [here](#) or visit the following website, <https://dpw.lacounty.gov/general/eforms/SimpleWorkflow/522.aspx>. For assistance, call 2-1-1.

County Public Works and Public Health representatives are available at the following locations to answer health questions and offer assistance with the reimbursement application process.

<b>Carson Community Center</b>	<b>Wilmington Senior Citizen Center</b>	<b>Victoria Regional Community Park</b>
801 E. Carson Street, Carson	1371 Eubank Ave., Wilmington	419 Martin Luther King Jr. St., Carson
9 a.m. to 6 p.m., daily	9 a.m. to 6 p.m., daily	7 a.m. to 7:00 p.m., daily



### Air Cleaners and Filters to Improve Indoor Air Quality and Remove Odors

As described above, if properly configured and maintained, air filters, designed for use in HVAC systems, may have the greatest potential to improve the air quality inside your home because most HVACs circulate very large volumes of filtered air. Portable units are usually best for single room use, rather than multiple room or whole-house use, because of their limited capacity to circulate large volumes of filtered air.

### How to Choose an HVAC Air Filters with Activated Carbon

These are available for purchase online, e.g., through Amazon or Walmart, and at local stores. You must choose the correct sized filter for your HVAC system. Follow the steps below when choosing a HVAC Air Filter with activated carbon:

- 1) Check your furnace manual for the correct sized filter or check the existing filter to determine dimensions. Most filters have the size prominently displayed on the surface in numerous places.
- 2) Look for filters designated as HEPA or that are Minimum Efficiency Reporting Value (MERV)-rated. The higher the value, the more particles are removed.
- 3) Look for filters with activated charcoal or activated carbon. They are commonly labeled as “odor eliminator,” “odor control,” or “odor reduction.”

### Some Examples of Certified Portable Air Filters/Cleaners, as listed by the California Air Resources Board (CARB)

Brand	Model Name	Model Number	Type	Date Notified	EO Number
Aireox	Model 45x	45B	Mechanical	2020-01-23	G-20-009
Levoit	Tower Pro HEPA Air Purifier	LV-H134	Mechanical	2019-06-05	G-19-086
Winix	5300-2	5500-2	Electronic	2016-04-20	G-16-053
GermGuardian	Air Purifier	RAC5250PT	Electronic	2018-12-14	G-18-136

These are just listed as examples; other brands and models of portable HEPA filters with activated carbon/charcoal exist. The ones listed were found to be available on Amazon and at local stores.

### California Air Resources Board (CARB) Certification

State regulation requires all air cleaners sold or distributed in California to be certified as not exceeding 50 parts per billion of ozone. CARB offers a list of [certified air cleaner models](#) on its web page. Note that this certification only covers ozone emissions and electrical safety; it does not include performance testing for removal of particles or chemicals from the airstream.

### OTHER RESOURCES

Please use the links below for the latest information on the following:

- **Information about hydrogen sulfide** <https://lacounty.gov/wp-content/uploads/2021/10/Hydrogen-Sulfide-ToxFAQs.pdf>
- **Updates regarding the response and related activities and community supports**  
Los Angeles County Office of Emergency Management  
<https://lacounty.gov/emergency/>
- **Current monitoring and findings:**  
South Coast Air Quality Management District  
<https://www.aqmd.gov/home/news-events/community-investigations/dominguez-channel>

