

Corpus Christi Refinery Row Odors Fact Sheet

August 2016

Introduction

This fact sheet will help you better understand how odors from chemicals like hydrogen sulfide might affect your health and quality of life.

Corpus Christi is in Nueces County, Texas. Near Corpus Christi's north end is an industrial area referred to as "Refinery Row"—approximately 10 miles of petrochemical facilities that are bordered by residential neighborhoods. Residents are concerned about breathing chemicals released from companies in Refinery Row and about the recurring odors in the area.

The Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency, has been involved in public health activities in Refinery Row for many years. One of the findings in ATSDR's 2016 report points to hydrogen sulfide as a chemical contributing to odors in the Refinery Row area.



What is Hydrogen Sulfide?

- a flammable, colorless gas
- can be released from both natural and manufactured sources
- smells like rotten eggs
- can be smelled at low levels

Where do hydrogen sulfide odors come from?

- petroleum refineries
- food processing plants
- pulp and paper mills
- farms with manure storage or livestock
- landfills
- sewage treatment plants
- swamps

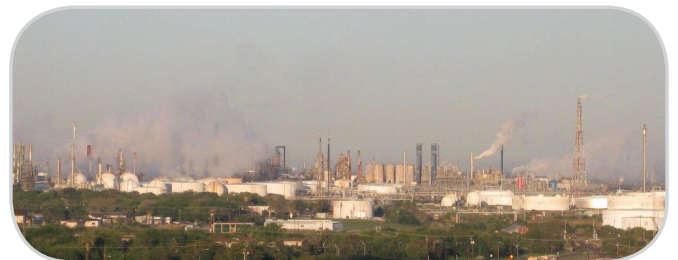


Photo: Corpus Christi Refinery Row

Were chemicals released at Refinery Row high enough to cause bad odors?

Yes. Our Refinery Row air data review showed that chemical releases to outdoor air, especially hydrogen sulfide, were regularly high enough that neighborhood residents could smell the odors. Odors affect area residents. Odors can produce health symptoms that reduce the quality of life and sense of well-being. However, most symptoms go away when the odor is gone, and in general, the Refinery Row air data indicate most chemicals are not at levels that can cause odor-related health symptoms.

Can odor-producing chemicals cause health symptoms?

Some chemicals give off strong odors that can cause some health symptoms and can worsen existing health conditions.

Health symptoms include:

- Headache
- Watery, itchy, or burning eyes
- Mood and behavior changes
- Dizziness
- Burning nose or throat
- Depression and sadness
- Nausea
- Coughing and wheezing
- Fear, annoyance, or stress



Sensitive Populations

Not everyone reacts to odors the same way.

In general, children, the elderly, and women may be more sensitive to odors. People with allergies, asthma, and other chronic conditions, as well as people suffering from depression and anxiety disorders, may not feel well when environmental odors are in the air they breathe.



Are there factors that affect how a person detects odors?

Yes. Age, gender, health condition, smoking status, and type of odor can affect an individual's reaction. Non-smokers may be more aware of odors than smokers. Everyone responds differently.

What can I do to protect my health?

- Exercise indoors or at another location on days when environmental odors are strong.
- Stay indoors when allergies, asthma, or chronic lung problems are acting up.
- If possible, get away from the environmental odor by leaving the area for a few hours.
- Remember, most odors are not a public health threat, and just because you smell an odor does not mean that unsafe amounts of chemicals are in the air. If you are worried that odor-producing chemicals may be affecting your health, call or visit your doctor to talk about your concerns.

Where can I learn more?

- ATSDR: www.atsdr.cdc.gov
- Environmental Odors: www.atsdr.cdc.gov/odors
- Hydrogen Sulfide (H₂S): www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=67

For questions regarding ATSDR activities at this site, call 800-CDC-INFO (232-4636) and ask for information on the Corpus Christi Refinery Row site or visit the Corpus Christi website at <http://www.atsdr.cdc.gov/sites/corpuschristi/>.