

Fact Sheet: Aliso Canyon Gas Leak Health Impacts

South Coast Air Quality Management District



This fact sheet provides information about the health impacts of the natural gas leak that began on October 23, 2015 at the Southern California Gas Company's (SoCal Gas) Aliso Canyon facility. Despite several attempts by SoCal Gas to stop the leak, natural gas is continuing to leak from the facility. The staff of the South Coast Air Quality Management District (SCAQMD) have been measuring air pollutants in the communities near the gas leak, focusing on the Porter Ranch neighborhood, which is located closest to the leak. Other neighborhoods have also reported odors from the gas leak, but the amounts of air pollutants from the gas leak in those communities are expected to be lower than in Porter Ranch.

What pollutants from the gas leak are getting into the air? What are the health impacts?

Natural gas primarily contains methane, but also has smaller amounts of other chemicals including benzene and other air toxics. Also, because methane is an odorless gas, small amounts of “odorants” are added to the gas to make leaks easier to detect. The odorants used by SoCal Gas contain tetrahydrothiophene (THT) and tert-butyl mercaptan, and give the natural gas a recognizable smell.

Methane	Methane is not considered toxic, but it is flammable in very high concentrations. However, measurements conducted by SCAQMD staff and other agencies in the Porter Ranch community show that methane levels are far below the concentrations where flammability would be a concern.
Odorants	The levels of odorants in the Porter Ranch community are generally lower than what can be measured with state-of-the-art air sampling equipment. However, even such low levels of odorants can be smelled in the air and can cause some physiological symptoms, consistent with many of the symptoms reported by community members living near the leaking well, such as headaches, nausea, and dizziness. Other symptoms, such as cough and eye irritation have also been associated with these odorants. Health experts ^{1,2} do not expect any long-term effects from these odorants, although there is limited scientific information available.
Benzene	Benzene is an air toxic that can come from a variety of sources, including exhaust from cars and trucks. Benzene is known to cause cancer and other health effects. Based on the limited measurements taken in the Porter Ranch community thus far, a preliminary analysis of the potential health risks due to benzene and other air toxics found that any increase in overall health risks from either short-term or long-term exposure to air toxic pollutants is likely to be relatively small. This preliminary analysis takes into account that young children are more sensitive to the effects of air pollution than adults. While additional exposures to air toxics can have effects on health, most measurements in the community showed benzene levels that were similar to typical outdoor air in Southern California. Some higher short-term benzene levels have been measured in the Porter Ranch community following the gas leak, although none exceeded the level expected to cause acute health effects.

More details on the preliminary evaluation of potential health impacts can be found on the SCAQMD website here:

<http://www.aqmd.gov/home/regulations/compliance/aliso-canyon-update/health-impacts-estimates>

¹ Office of Environmental Health Hazard Assessment. “Aliso Canyon Underground Storage Field, Los Angeles County.” 15 January 2016. Web. 20 Jan. 2016.

² Los Angeles County Department of Public Health. “Aliso Canyon Gas Leak, Health Fact Sheet.” Los Angeles, California. 13 November 2015. Web. 15 Jan. 2016.