

## Aliso Canyon Natural Gas (Methane) Leak

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Several California, local, and federal agencies are responding to the natural gas leak at the Southern California Gas Company Aliso Canyon Facility that is affecting the Porter Ranch neighborhood in Los Angeles. The National Library of Medicine Disaster Information Management Research Center (NLM Disaster Health) provides information on public health aspects of chemical incidents for the benefit of health professionals and volunteers who may be responding to an incident and for people living in or concerned about an affected region.

The primary releases from the well are natural gas (methane) and odorants (t-Butyl mercaptan and tetrahydrothiophene). There is also an “oily mist” containing assorted chemicals: benzene, toluene, ethylene, xylene, and other organics consistent with oil residues from the former oil drilling facility site. Air sampling has also noted radon and hydrogen sulfide. The chemical information below is from National Library of Medicine TOXNET resources: Hazardous Substances Data Bank (HSDB); Integrated Risk Information System (IRIS); ChemIDPlus; and Tox Town.

### California Government Agencies

Governor’s Office of Emergency Services

- Aliso Canyon Natural Gas Leak  
<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx>

California Environmental Protection Agency (Cal-EPA)

Air Resources Board

- Aliso Canyon Natural Gas Leak  
[http://www.arb.ca.gov/research/aliso\\_canyon\\_natural\\_gas\\_leak.htm](http://www.arb.ca.gov/research/aliso_canyon_natural_gas_leak.htm)
- Community Air Monitoring near Aliso Canyon Natural Gas Leak  
[http://www.arb.ca.gov/research/aliso\\_canyon/community\\_methane\\_monitoring.htm](http://www.arb.ca.gov/research/aliso_canyon/community_methane_monitoring.htm)

Office of Environmental Health Hazard Assessment

- OEHHA Emergency Response: Aliso Canyon Underground Storage Field, Los Angeles County  
[http://oehha.ca.gov/public\\_info/emergency/alisocanyon.html](http://oehha.ca.gov/public_info/emergency/alisocanyon.html)

#### South Coast Air Quality Management District

- Aliso Canyon Update  
<http://srvwww.aqmd.gov/home/regulations/compliance/aliso-canyon-update>

#### County of Los Angeles

- Aliso Canyon Gas Leak  
<http://www.lacounty.gov/alisocanyon>

#### Los Angeles Office of the Mayor

- Resources for Residents Affected by the Aliso Canyon Natural Gas Leak  
<http://www.lamayor.org/aliso-canyon-natural-gas-leak-resources>

#### Los Angeles County Department of Public Health

- Aliso Canyon Gas Leak: Health Fact Sheet  
<http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFactSheet.pdf>  
Also available in:  
Spanish: [http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ\\_Spanish.pdf](http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ_Spanish.pdf)  
Armenian: [http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ\\_Armenian.pdf](http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ_Armenian.pdf)  
Korean: [http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ\\_Korean.pdf](http://publichealth.lacounty.gov/eh/docs/AlisoCanyonFAQ_Korean.pdf)

#### Los Angeles Unified School District

- Aliso Canyon Natural Gas Leak: News and Information  
<http://achieve.lausd.net/Page/4244>

### **Southern California Gas Company (SoCalGas)**

- Aliso Canyon Information Center  
<https://www.alisoupdates.com/main>
- Aliso Canyon Air Sample Results  
<https://www.alisoupdates.com/acu-aliso-canyon-air-sample-results>
- Aliso Canyon Storage Facility: Health Issues Questions and Answers  
<http://www.socalgas.com/documents/news-room/aliso-canyon-health-faq.pdf>

### **U.S. Federal Organizations**

#### National Institute of Environmental Health Sciences (NIEHS)

- Mechanism for Time-Sensitive Research Opportunities in Environmental Health Sciences (R21): <http://grants.nih.gov/grants/guide/pa-files/PAR-13-136.html>. Not currently offered for this incident; included as background information.

- Disaster Research Response Project: <http://dr2.nlm.nih.gov>. Protocols, tools and technical assistance for researchers interested in disaster-related data collection.
  - Rapid Acquisition of Pre- and Post-Incident Data (RAPIDD) Study Protocols <http://dr2.nlm.nih.gov/protocols>
  - Data collection tools for measuring environmental exposures and symptoms:
    - Respiratory: <http://dr2.nlm.nih.gov/search/respiratory>
    - Neurological: <http://dr2.nlm.nih.gov/search/neurological>
    - Mental Health: [http://dr2.nlm.nih.gov/search?data\\_type=4](http://dr2.nlm.nih.gov/search?data_type=4)
    - Environmental Exposures: [http://dr2.nlm.nih.gov/search?data\\_type=2](http://dr2.nlm.nih.gov/search?data_type=2)
- Southern California Environmental Health Sciences Center, Department of Preventive Medicine, University of Southern California: <https://scehsc.usc.edu/>. The Center is funded by NIEHS and can be contacted directly for further information on their role in the leak-related efforts.

#### U.S. Environmental Protection Agency

- US EPA Involvement in the Response to the Natural Gas Leak at the Southern California Gas (SoCalGas) Aliso Canyon Facility <http://www3.epa.gov/region9/mediacenter/alisocanyongasleak/index.html>
- Letter from US EPA to Southern California Gas Company <http://www3.epa.gov/region9/mediacenter/alisocanyongasleak/epa-letter-to-dennis-arriola-rfi-2015-12-18.pdf>

#### Centers for Disease Control and Prevention

- Tools and Surveys for researchers
  - Community Assessment for Public Health Emergency Response (CASPER) <http://dr2.nlm.nih.gov/search/%22Community%20Assessment%20for%20Public%20Health%20Emergency%20Response%22>
  - ATSDR Assessment of Chemical Exposures Toolkit [http://dr2.nlm.nih.gov/search/Assessment%20of%20Chemical%20Exposures%20\(ACE\)%20General%20Survey%20](http://dr2.nlm.nih.gov/search/Assessment%20of%20Chemical%20Exposures%20(ACE)%20General%20Survey%20)

### Health Information on Chemical Components of Leak

Main Gas Released: **Methane** (RN: 74-82-8)

- Hazardous Substances Data Bank (HSDB): <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+167>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/74-82-8>

Odorant: **t-Butyl Mercaptan** (RN: 75-66-1)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+1611>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/75-66-1>

Odorant: **Tetrahydrothiophene** (RN: 110-01-0)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+6122>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/110-01-0>

**Additional chemicals in “Oily Mist” typical of oil and gas fields**

**Benzene** (RN: 71-43-2)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+35>
- Integrated Risk Information System (IRIS): <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+iris:@term+@DOCNO+IRIS0276>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/71-43-2>

**Toluene** (RN: 108-88-3)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+131>
- IRIS: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+iris:@term+@DOCNO+IRIS0118>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/108-88-3>

**Ethylene** (RN: 74-85-1)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+168>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/74-85-1>

**Xylenes** (RN: 1330-20-7)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+4500>
- IRIS: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+iris:@term+@DOCNO+IRIS0270>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/1330-20-7>

**Additional chemicals tested in sampling:**

**Radon** (RN: 10043-92-2)

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+6369>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/10043-92-2>

**Hydrogen sulfide (RN: 7783-06-4)**

- HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+576>
- IRIS: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+iris:@term+@DOCNO+IRIS0061>
- ChemIDPlus: <http://chem.sis.nlm.nih.gov/chemidplus/rn/7783-06-4>

**Social Media**

News, announcements, personal opinions and commentary

Twitter hashtags:

#PorterRanchGasLeak  
#methaneLeak  
#methane  
#socialgas  
#AlisoCanyon  
#PorterRanch  
#ShutItALLDown

There are no Twitter accounts solely on the topic of the leak.

**Health Resources for the Public from the National Library of Medicine**

Tox Town

- Methane: [http://toxtown.nlm.nih.gov/text\\_version/chemicals.php?id=92](http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=92)
- Oil and Gas Fields: [http://toxtown.nlm.nih.gov/text\\_version/locations.php?id=150](http://toxtown.nlm.nih.gov/text_version/locations.php?id=150)
- Natural Gas: [http://toxtown.nlm.nih.gov/text\\_version/chemicals.php?id=18](http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=18)
- Benzene: [http://toxtown.nlm.nih.gov/text\\_version/chemicals.php?id=5](http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=5)
- Toluene: [http://toxtown.nlm.nih.gov/text\\_version/chemicals.php?id=30](http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=30)
- Radon: [http://toxtown.nlm.nih.gov/text\\_version/chemicals.php?id=27](http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=27)

Tox Town en español

- Metano: <http://toxtown.nlm.nih.gov/espanol/chemicals.php?id=93>
- Yacimientos de petróleo y gas: <http://toxtown.nlm.nih.gov/espanol/locations.php?id=161>
- Gas natural: <http://toxtown.nlm.nih.gov/espanol/chemicals.php?id=49>
- Benceno: <http://toxtown.nlm.nih.gov/espanol/chemicals.php?id=37>
- Toluene: <http://toxtown.nlm.nih.gov/espanol/chemicals.php?id=62>
- Radón: <http://toxtown.nlm.nih.gov/espanol/chemicals.php?id=61>

#### MedlinePlus

- Chemical Emergencies: <https://www.nlm.nih.gov/medlineplus/chemicalemergencies.html>
- Coping with Disasters: <https://www.nlm.nih.gov/medlineplus/copingwithdisasters.html>

#### MedlinePlus en español

- Emergencias químicas  
<https://www.nlm.nih.gov/medlineplus/spanish/chemicalemergencies.html>
- Enfrentarse con desastres:  
<https://www.nlm.nih.gov/medlineplus/spanish/copingwithdisasters.html>

#### Resources compiled by:

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