Three years later, what we learned from Aliso Canyon

By HENRY STERN
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Last week marks three years since the gas storage facility at Aliso Canyon blew out, leaking methane and other, still unknown, chemicals into the air above Porter Ranch, in what became the biggest gas leak in U.S. history. For four months, the air in this community was choked with toxic fumes, harming children, the elderly and first responders alike, and thousands of families were dislocated. More than 100,000 tons of methane were released, the carbon pollution equivalent to burning over a billion gallons of gasoline.

In the time since the disaster, we’ve learned some critical lessons about the climate and health risks from gas operations and infrastructure and what we can do to combat these risks.

We learned from Aliso Canyon that there’s no “safe” level of gas for your health. In those first days following the leak, firefighters and other first responders, assured by the Southern California Gas Company that there was no danger, rushed to the site without protective gear. Those firefighters are now suing SoCalGas – alleging the utility tried to downplay the dangers of gas while knowingly exposing first responders to hazardous toxins that have caused ongoing health issues – including cancer.

Thousands of families, increasingly alarmed about the air they were breathing, were eventually evacuated from their homes – but not before experiencing headaches, nausea, nosebleeds, rashes, breathing difficulties and other mysterious health symptoms. The Gas Company has attributed the health effects – without rigorous scientific study – to the odorants, called mercaptans, added to the natural gas to give it its distinctive rotten egg smell. But, methane and odorants were far from the only chemicals released during the blowout. Other chemicals, including crude oil that was being quietly produced at the facility, were also released. Many residents of the northern San Fernando Valley still don’t know the extent of the poison in their bodies or how it will affect them as the years go on.

We also learned from Aliso Canyon that there’s no safe level of gas for the climate. All told, 100,000 metric tons of methane were released, a greenhouse gas 80 times more potent that carbon dioxide. Although Aliso Canyon was the nation’s largest man-made greenhouse gas disaster, we’ve learned it is far from unique. Methane emissions are much more common and happening in far larger volume than previously believed.
Nationwide, oil and gas operations release approximately 13 million metric tons of methane each year—
that’s an Aliso Canyon disaster every three days.

Aging facilities like Aliso Canyon that have been repurposed to store natural gas should not be allowed to
operate in our backyards. Especially not when they operate on a major earthquake fault in a high fire risk
region. While some important steps have been taken to address fugitive emissions from California's
pipelines, the Trump Administration and Congress have systematically rolled back natural gas safety
regulations.

Adding insult to injury, the California Air Resources Board recently ignored the cries of the community and a
request from 29 state legislators, by allowing SoCalGas to mitigate the damages of the Aliso disaster entirely
outside of Los Angeles region, funneling over $25 million to a single dairy digester project in the Central
Valley that will do nothing to clean the air in the San Fernando Valley or reduce our dependency on Aliso
Canyon.

Fortunately, California consumers have new tools and incentives to electrify their lives with local clean
energy. The next time your old water heater or furnace quits on you, you’ll have new options at your disposal
to replace that gas-fired appliance with a smarter electric version, thanks to Governor Brown’s signature of
my Senate Bill 1477. Working with builders and manufacturers to reduce the cost of gas-free appliances like
super-efficient electric heat pumps could save you thousands of dollars on expensive installations and
ongoing gas bills.

As the grid gets cleaner and more durable with new advances in energy storage, localized micro-grids and
our new statewide target of 100 percent clean electricity by 2045, an electrified future is looking brighter than
ever.

We don’t need Aliso Canyon. Despite dire warnings from the Gas Company of blackouts while Aliso was
closed, during the period this gas field was taken offline, the market responded as Southern California
Edison, Tesla, and a number of other local innovators, stepped up to deploy non-gas forms of energy
storage, in record time. That is why our Lt. Governor Gavin Newsom has committed to closing Aliso Canyon
even more quickly than the decade horizon Governor Brown proposed last year.

Three years later, the lesson from Aliso Canyon is clear: depending on gas to fuel our lives is a risk we
cannot afford to take. Empowering businesses and residents to electrify their lives with clean energy
technologies will allow Californians to move past gas and get on with the future.

Sen. Henry Stern (D-Canoga Park) represents nearly 1 million residents of the 27th District living in east Ventura County
and northwest Los Angeles County, including the community of Porter Ranch.

CaliforniaGeo Responds—

The memory of this multi-month disaster and its damage lingers for those close-in to the blow-out. California
has become too comfortable with this form of fossil fuel use over many decades. Even though climate
change and its causes are better understood than ever, California still gives a pass to this not-so-natural
(gas) called methane.

Title-24 regulations managed by the California Energy Commission, still prioritize gas boilers, furnaces, and
hot water heaters in all new construction that occurs within already-piped territory. This regulatory policy
provides no reduction in greenhouse gas emissions in keeping with AB 32. When burned, methane makes
carbon dioxide. When leaked, (the national average being 7% of all gas between wellhead and your meter)
that methane is over 80 times stronger than CO2 in making the greenhouse gas problem worse for 25 years.
And that’s about all the time we have left to reign-in global warming.

The cleanest electrons come from renewable electricity generation and the cleanest heating, cooling, and hot
water come from refrigerant compression through ground source (geothermal) heat pumps. Beneficial
electrification represents a cleaner and safer future for all of us. By using a universally available
underground resource for heat exchange with the earth, we can avoid combusting traditional fuels that raise
temperatures and contribute pollutants to the air.
Moving toward renewability in all things means that we can sustain our air, land, and water with better defense against climate change. Geothermal heat pumps can lead the way.

— Bill Martin