



Finding the ways that work

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**Subject: Additional review of state regulations and inventories is needed following the recent and ongoing Aliso Canyon Storage Field release.**

Dear Mr. McCarthy, Ms. Scheehle and Mr. Magee,

As a result of legislation passed over the past several years, including AB 32, SB1371 and SB 605, your agencies are currently undertaking an intensive review of existing requirements and development of new regulations to reduce the environmental impact of the state's oil and gas infrastructure. Although these efforts have each achieved significant progress, recent events in Southern California at the Aliso Canyon natural gas storage field operated by the Southern California Gas Company (SoCalGas) have brought to light an important regulatory gap in the management of California's natural gas infrastructure that warrants your attention.

As reported by several news outlets and the utility, starting on October 24, a significant release of stored natural gas began at the Aliso Canyon facility from a malfunction at an injection well– and continues today. [According to utility documents](#), this facility has a working inventory of over 84 billion standard cubic feet (scf) of gas at a working pressure of almost 3500 psi, and a single well is capable of releasing 80 million scf per day. At this rate, a single well may release as much gas in one day as 1,785 houses would use in a single year, or approximately 36,500 metric tons of CO<sub>2</sub>e.

Based on [utility testimony filed with the California Public Utilities Commission in 2014](#), “a negative well integrity trend seems to have developed since 2008” [at storage fields owned by So Cal Gas]. Furthermore, SoCalGas reports it has “52 storage wells in service that are more than 70 years old. Half of the 229 storage wells are more than 57 years old as of July 2014,” - meaning more of these types of leaks may occur in the future as infrastructure continues to age. With these leaks comes more environmental damage – as methane, the principle component of natural gas, is a greenhouse gas approximately 84 times more potent than carbon dioxide at contributing to climate change over a 20 year timeframe.

After a review of the current regulatory landscape, we have the following four observations and requests:

- 1) An accurate and public accounting of the gas lost at Aliso Canyon, and other events of this magnitude, must be made, and these calculations must be taken into account in statewide inventories. Of course, the primary response to any leak is to address the source and protect human health and welfare. However, accurate and public accounting of natural gas releases give stakeholders a clear understanding of the magnitude of environmental risk associated with inadequate management of storage infrastructure.
- 2) The state's recently designed approach to controlling methane emissions from oil and gas operations currently targets above ground piping on natural gas storage sites, and doesn't take into account episodic releases or chronic releases from gas migration associated with subsurface malfunctions. For example, while operators may be required to inspect facilities and equipment on a regular basis, there are currently no regulatory proposals for methane control that require automated ongoing methane detection equipment. A review of the existing proposals to ensure real-time detection of methane releases is therefore warranted.
- 3) Unfortunately, several reports indicate that many members of the public were negatively impacted by this release. Although laws and regulations protect the public safety and welfare, the environment has also been impacted - yet it has little recourse since there is no regulation that directly limits the amount of methane a natural gas storage facility may emit. Based on the potential magnitude of the release at hand, and others like it, we request a review by your agencies of the appropriateness of instituting a direct regulation to limit the amount of methane that may be emitted to the atmosphere from natural gas storage fields.
- 4) Finally, it appears that several factors may be at play here, including a recent major \$200 million [upgrade to increase injection rates into the](#) site, significant historic [human-caused subsurface rock fracturing](#), and an aging and increasing leaky infrastructure. As a result, we request you work with relevant state agencies to ensure a thorough causal analysis of the incident and geotechnical review of the site be performed to prevent this type of incident from happening in the future.

Natural gas storage is a critical resource for California's economy, and a necessary component of the state's approach to create a more responsive gas grid that complements intermittency, maximizes efficient use of pipelines, and enables electric grid decarbonization. As this event illustrates though, the state also needs tools to ensure storage is performed in an environmentally protective manner.

Thank you for your attention on this important matter.



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cc:

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Michael Picker, California Public Utilities Commission  
Robert Weisenmiller, California Energy Commission  
Cliff Rechtschaffen, Office of the Governor  
Steven Bohlen, California Department of Conservation