

# ALISO CANYON STORAGE FACILITY

NOVEMBER 4, 2016

## STRENGTHEN. MONITOR. COMMUNICATE.

SoCalGas® has made comprehensive infrastructure, technology, and safety enhancements at Aliso Canyon storage facility that strengthen the facility's infrastructure, introduce real-time pressure monitoring, and enable improved communication with stakeholders. We have requested regulatory approval to resume injection operations at Aliso Canyon through approved wells to replenish the supply of natural gas at the facility to support the heating, cooking, and electricity needs of residents and businesses across Southern California.

### COMPREHENSIVE SAFETY REVIEW

To date, 29 storage wells at the Aliso Canyon storage facility have passed all of the tests required under the Division of Oil, Gas and Geothermal Resources' (DOGGR) Comprehensive Safety Review. In compliance with the Safety Review, the remaining wells have been temporarily and mechanically sealed off from the storage reservoir.

In addition to being mechanically sealed and isolated from the pressure in the field, wells that are temporarily sealed are filled with fluid to provide a second barrier of protection. Daily observation of these temporarily sealed wells will continue and they are also being monitored in real time for pressure changes. A video explaining this process is available at [youtube.com/watch?v=9PrwbqRuOwI](https://www.youtube.com/watch?v=9PrwbqRuOwI).

Wells that have been temporarily and mechanically sealed will either complete the second phase of required testing or be permanently sealed and taken out of service, per regulation.

### STRENGTHENING INFRASTRUCTURE

SoCalGas has strengthened the infrastructure at Aliso Canyon, creating multiple layers of safety.

- The inner metal tubing of every well approved for injection has been replaced. In total, more than 40 miles of new steel piping has been installed.
- A physical barrier, or casing around the new inner metal tubing – tested to ensure integrity under pressure – will provide a secondary barrier of protection against potential leaks.
- Withdrawal and injection of natural gas now will occur only through newly installed inner metal tubing of wells that have passed all tests and have been approved for use by DOGGR.

### INITIAL PHASE ONE TESTS ON ALL 114 WELLS HAVE BEEN COMPLETED

85

WELLS  
IN PHASE TWO78 WELLS  
MECHANICALLY  
SEALED  
AND ISOLATED  
AWAITING  
DIAGNOSTIC  
TESTING7 WELLS  
IN DIAGNOSTIC  
TESTING

29

WELLS  
DOGGR  
APPROVED

\*Well Inspection Numbers as of November 4, 2016



## MONITORING AND CONTINUOUS IMPROVEMENT

SoCalGas has implemented a suite of advanced monitoring technologies and practices that will allow for early detection of leaks and help quickly identify anomalies, such as changes in well pressure. This will support prevention and mitigation efforts. We also recently submitted a risk management plan to DOGGR for review that includes ongoing physical assessments and monitoring of each well to enhance the safety of the facility.

In addition, a number of technology and safety enhancements and practices to improve monitoring have been introduced, including:

- An infrared fence-line methane detection system with eight pairs of infrared methane monitors;
- Around-the-clock pressure monitoring of all wells in a 24-hour operations center;
- Daily patrols to examine every well are conducted four times each day;
- Daily scanning of each well using sensitive infrared thermal imaging cameras that can detect leaks;
- Enhanced training for our employees and contractors.

In addition, at DOGGR's direction, SoCalGas will operate wells at a reduced pressure, increasing the margin of safety.



## IMPROVING COMMUNICATION

### ALISO CANYON COMMUNITY ADVISORY COUNCIL

To strengthen outreach to the Porter Ranch community, we have formed a new Aliso Canyon Community Advisory Council that consists of residents, business owners, and community leaders from various constituencies throughout the Porter Ranch area, as well as representatives from faith-based organizations, the Los Angeles Police Department, the Los Angeles Fire Department, and other stakeholders.

### AIR QUALITY NOTIFICATIONS

An air quality notification system that provides residents the opportunity to receive prompt information via phone call, text message and/or email, in the event of a reportable release of natural gas, is now operational. Community members can register for notifications by visiting [socalgas.com/airqualitynotifications](http://socalgas.com/airqualitynotifications) or by calling 1-877-238-0092.

### SOCALGAS.COM

For more information, please visit [socalgas.com/alisoupdates](http://socalgas.com/alisoupdates).

## CONTINUING TO DELIVER ON OUR COMMITMENTS

### ADDRESS GREENHOUSE GAS EMISSIONS

We are evaluating greenhouse gas emissions mitigation from multiple sources, such as dairies and landfills in California. We have signed letters of intent with several California dairies to manage emissions and will finalize our mitigation plan in the coming months.

### INVESTIGATE THE CAUSE OF THE LEAK

SoCalGas continues to work in support of the California Public Utilities Commission (CPUC) Safety and Enforcement Division's and DOGGR's ongoing investigation of the root cause of the leak at Aliso Canyon. The investigation is now expected to be completed during the first half of 2017, but the timing is under the control of the CPUC Safety and Enforcement Division and DOGGR.

### COMMUNITY RESOURCE CENTER

Since its opening in December 2015, the Community Resource Center (CRC) has facilitated more than 38,000 visits from residents. The CRC will close on Friday, November 18, 2016.

### LEARN MORE

- The Importance of Aliso Canyon  
[youtube.com/watch?v=\\_O37TQTd6E8](https://youtube.com/watch?v=_O37TQTd6E8)
- Well Inspection Process  
[youtube.com/watch?v=mTRIZkWD3VE](https://youtube.com/watch?v=mTRIZkWD3VE)
- Aliso Canyon Infrastructure, Technology, and Safety Enhancements  
[youtube.com/watch?v=BMDUfCMXX\\_o](https://youtube.com/watch?v=BMDUfCMXX_o)
- Mechanical Well Seal and Isolation Process  
[youtube.com/watch?v=9PrwbqRuOwI](https://youtube.com/watch?v=9PrwbqRuOwI)