

## **SB 463 CHEMICAL INVENTORY AND ROOT CAUSE ANALYSIS REGULATIONS**

### **UPDATED INFORMATIVE DIGEST**

There have been no changes in applicable laws or to the effect of the proposed regulations from the laws and effects described in the Informative Digest included with the Notice or Proposed Rulemaking Action for this rulemaking action.

The amendments and additions to the Division's existing UGS regulations proposed in this package implement the requirements of SB 463 and lessons learned by Division regulatory professionals as they have applied the dedicated UGS regulations that became effective in 2018.

The proposed regulations address requirements in several important topical areas: the development, submittal, and updating of chemical inventory contents and data; and regulatory updates necessary to respond to the Blade Report findings and to prevent damage to life, health, property, and natural resources including

- corrosion evaluation, mitigation, and monitoring, including consideration of cathodic protection,
- requirements to include well-specific well control planning in an emergency response plan,
- and the evaluating, addressing, and retaining records of leaks and other events that impact safety

In general, this rulemaking action will modernize, clarify, and augment the regulatory standards applicable to UGS projects in California to reduce threats to life, health, property, and natural resources, and protect stored resources, surface and underground waters, and the public welfare. The proposed chemical inventory regulations will provide needed transparency and information about the chemicals to which the public may be exposed in the event of a release from a gas storage well. The other proposed regulations and amendments will enhance the Division's existing UGS regulations to support and facilitate operator detection, investigation, evaluation, and mitigation of well integrity issues. This action will increase transparency regarding the Division's regulatory standards and expectations for UGS projects and is necessary to effectuate the Division's statutory mandates under Public Resources Code sections 3011, 3106, 3180, 3181, 3181.5, 3183, 3186.3, 3220, and 3403.5.

These regulations are the result of consideration of extensive public input and consultation with other state regulatory agencies. After substantial pre-rulemaking stakeholder engagement, the first public comment period on the originally proposed regulations was held from April 19, 2024, through June 5, 2024 pursuant to the Notice of Proposed Action mailed to interested parties and duly published in the California Regulatory Notice Register on April 19 (Register 2024, Number 16Z, April 19, 2024). During that public comment period, one public hearing was conducted virtually on June 4, 2024. After reviewing the comments received, engaging in further direct consultation with interested stakeholders, and revising the text of the proposed regulations, the Division held two subsequent 15-day comment periods on the modified text of the proposed regulations.

The revised regulations are consistent in purpose and scope with the original Informative Digest for this rulemaking action. In response to stakeholder comments received, the Division crafted the regulations to be less burdensome and more cost-effective, and equally or more effective to carry out the regulatory purposes discussed in the Informative Digest. Below is a section-by-section summary of the revisions made to the originally proposed regulations.

## **SUMMARY OF 15-DAY REVISIONS**

### 1726.1 Definitions

Definitions were updated for clarity based on feedback received during the public comment period. Substantive changes to the definitions included:

- Edits to the definition of a “Gas Storage Well Chemical Inventory” were made to include related data as required in section 1726.4.3. This cross reference will notify operators of the existence of a new section related to chemical inventories.
- Edits to the definition of “Inflow Performance Relationship” to focus on absolute open flow potential rather than production flow rates and drawdown pressures.

### 1726.3 Risk Management Plan

The risk management plan scheme has been updated as follows:

- Operators are now required to maintain a documented list of changes made to the Risk Management Plan for review by the Division during Risk Management Plan review.
- Operators must develop a protocol for evaluating, addressing, and retaining records of risk related conditions identified through reporting requirements to CalGEM and other agencies. Proposed Section 1726.3.3 has been deleted as duplicative of other reporting requirements.

#### 1726.3.1 Emergency Response Plans

The emergency response plan was modified as follows:

- Well specific well control plans must include well specific deliverability and configuration, with data and models available to the Division upon request.
- Identification of monitoring, sampling, and testing methods and procedures to require engagement with the Division when triggered. Repair of a leak shall not be delayed to complete this testing.
- The emergency response plan must now be updated at least once per calendar year, no less often than every 15 months.

#### 1726.3.2 Corrosion Evaluation, Mitigation, and Monitoring

This section has been modified to focus on addressing identified corrosion risk mitigation and to clarify that mitigation and monitoring strategies should be used for wells with identified corrosion risk. Modifications include:

- The Risk Management Plan shall include a protocol to evaluate corrosion and to establish a corrosion risk for each gas storage well.
- Evaluation of the well's components including the likelihood of its casings to corrode.
- Detected anomalies are added as something considered during the evaluation of corrosion risk. Deleted reference to noise and temperature logging.
- Observation of corrosion of wells within the same field as an environmental condition that must be considered. Location relative to other wells has been removed.
- Requirement to evaluate each well after each casing wall thickness test and anytime the data indicates a need for reevaluation. Removal of the need to prioritize corrosion risks.

- Conversion of the corrosion monitoring plan to risk mitigation protocols provided to the Division during scheduled Risk Management Plan updates.
- Requirement to update the risk management protocols after changes to mitigation strategies which shall be provided to
- the Division upon request and during scheduled Risk Management Plan updates.
- Designation of essential records to ensure records are kept for the life of the facility.

### 1726.3.3 Investigating, Tracking and Reporting Off-Normal Occurrences

This section has been deleted as duplicative. Instead, the Risk Management Plan requires operators to report risk related conditions consistent with already required reporting to CalGEM and other federal and state agencies.

### 1726.4.3 Gas Storage Well Chemical Inventories

The Gas Storage Well Chemical Inventory section has been modified for clarity and to make clear that some testing is baseline testing that only needs to take place once. These changes include:

- Pluralization. As appropriate, the word inventory has been pluralized to inventories throughout this section.
- Materials tracked shall now only include items intentionally placed in the well with the added items such as biocides and well control fluids.
- Well kill fluids are now referred to as well control fluids used to kill the well in the event of a reportable leak.
- Clarification of the requirement to perform baseline analytical tests to establish presence and quantity of chemical constituents.
- A requirement for the sampling and testing for radon-222 at the end of injection season or when the reservoir is near its maximum inventory for the year.
- Testing for metals shall be done from a liquid sample if available.
- A requirement for analytical test laboratory reports and analysis includes chain of custody documentation.
- A requirement to complete analytical baseline testing as soon as practicable but not later than twelve months from the effective date of the regulations.
- A requirement for additional testing and analysis based on indicating that other potentially harmful chemicals may be found in the reservoir.

- A requirement to create a protocol to ensure the provision of an updated (current and complete) chemical inventory in the event of a reportable leak, if needed.
- A requirement for the reporting of storage gas presence and composition in the chemical inventory.
- Provisions for what to do in case of an assertion of trade secret protections.
- If the protocol is updated it shall be submitted to the Division along with the next Gas Storage Well Chemical Inventory submission.