California
Department of Conservation

California Geologic Energy Management Division

UNDERGROUND INJECTION CONTROL PROGRAM REPORT

PERMITTING & PROGRAM ASSESSMENT

Reporting Period: April 1, 2023, to March 31, 2024

Prepared Pursuant to Public Resources Code section 3114, subdivision (a)

Senate Bill 1493 (Ch. 742, Stats. of 2018)

November 7, 2025

Gavin Newsom, Governor, State of California
Jennifer Lucchesi, Director, Department of Conservation

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ABOUT THE CALIFORNIA GEOLOGIC ENERGY MANAGEMENT DIVISION

The California Geologic Energy Management Division (CalGEM) prioritizes the protection of public health, safety, and the environment in its oversight of the oil, natural gas, and geothermal operations in California. To do that, CalGEM uses science and sound engineering practices to regulate the drilling, operation, and permanent closure of wells associated with the discovery and production of oil, gas, and geothermal resources. CalGEM also regulates certain pipelines and facilities associated with production and injection. These regulatory duties include witnessing tests, inspections, and subsurface operations.

When CalGEM was established in 1915 (then known as the Department of Petroleum and Gas), the initial focus of regulation was the protection of oil and gas resources in the State from production practices that could harm the ultimate level of hydrocarbon recovery.

Early CalGEM regulations included well spacing requirements and authority to limit production rates. However, those regulations and the focus of CalGEM have evolved and come to include the protection of public health, safety, and the environment.

CalGEM has grown significantly since it was established in 1915 and has taken major steps to ensure it will be able to handle challenges in a manner consistent with public expectations for a modern, efficient, collaborative, and science-driven regulatory agency.

In 2019, the mission of CalGEM changed to include protecting public health and safety, environmental quality, and the reduction and mitigation of greenhouse gas emissions associated with the development of hydrocarbon and geothermal resources in a manner that meets the energy needs of the state.

CalGEM Districts

CalGEM operates out of three districts (Northern, Central, and Southern) to best serve the needs of the State. Each district has its own office(s) where staff are available to assist the public and stakeholders. For more information about CalGEM, visit our website at: https://www.conservation.ca.gov/calgem

EXECUTIVE SUMMARY

This sixth annual report on underground injection control (UIC) operations in California provides the information required by Senate Bill 1493 (Committee on Natural Resources and Water, Ch. 742, Statutes of 2018) for the period from April 1, 2023, to March 31, 2024.

The following are key facts from this report:

- One Class II UIC project application was approved by CalGEM during this reporting period.

- Beginning from receipt of an application to approval and issuance of the Project Approval Letter (PAL), the average total project review time was 908 days, or about 30 months. This is more than the prior year's average of 25 months and includes the time it takes for the operator to respond to CalGEM's review of the initial submission until the application is deemed complete.

- Beginning from the date CalGEM's district office deemed UIC project applications complete, the average time to approval was 832 days. Once an application package is deemed complete, a detailed technical review begins, which includes reviews by both CalGEM and the State Water Resources Control Board (State Water Board) and applicable regional water quality control board (collectively Water Boards). The average review time for UIC project applications, starting from the date of package receipt, was 669 days for CalGEM and 279 days for the Water Boards. Water Board and CalGEM review may take place concurrently.

- During the reporting period, the monthly average number of pending project applications (New, Expansion, Expansion/Existing Active UIC projects to ensure full compliance with current statutes/regulations) was 106. As of March 31, 2024, 107 applications had been pending for over one year.

- There were 15 pending aquifer exemption (AE) package proposals during the majority of the reporting period. In February 2024, the applicant operator for Round Mountain (South Area) withdrew the application, resulting in 14 current AE package proposals. Among the 14 pending AE packages, seven remain out of compliance with the Safe Drinking Water Act (SWDA). No AE proposal approvals were received from the US EPA during the reporting period.

- A total of 21 enforcement actions were taken to address a total of 49 UIC-related violations identified during the reporting period. One enforcement action may cover multiple violations.

- There were 80 well shut-ins during this period due to wells automatically losing injection approval under circumstances prescribed in the updated UIC regulations.

- CalGEM had approximately 81 full-time equivalent UIC staff. This is based on an estimated percentage of time staff spent performing UIC-related tasks during the reporting period and it does not include vacancies. There were approximately six full-time equivalent UIC vacancies.

- The Water Boards had 28 full-time equivalent staff positions working on UIC tasks during the reporting period. The Water Boards had two full-time equivalent vacancies during the reporting period.

- As of March 31, 2024, CalGEM has completed its internal review of 47 approved UIC projects for compliance with applicable statutes and regulations and they have been forwarded to the Water Boards for their review. As of March 31, 2024, there were 569 projects that have not yet been reviewed for compliance with today's statutes and regulations. Preliminary data gathering is underway for most of CalGEM's 771 active UIC projects.

- Upon the UIC Review Panel contract's expiration on March 31, 2024, CalGEM did not pursue a third contract with LBNL due to improvements to the UIC Program brought on through updated regulations and an external audit performed by Department of Finance's Office of Audits and Evaluations, which made any further recommendations unnecessary.

INTRODUCTION

Objective & Scope of Report

This annual report on the CalGEM Underground Injection Control (UIC) Program is required by Senate Bill (SB) 1493 (Committee on Natural Resources and Water, Ch. 742, Statutes of 2018), as codified in Public Resources Code section 3114.

This sixth SB 1493 report covers the period from April 1, 2023, to March 31, 2024, and is synchronized with the United States Environmental Protection Agency (US EPA) 7520 reporting cycle which is the source of data and information for items referenced in Public Resources Code section 3114, subdivision (a)(8) through (a)(10).

Report Requirements

Public Resources Code section 3114, subdivision (a), requires CalGEM to provide, in consultation with the State Water Resources Control Board (State Water Board), the following information about the UIC Program:

1. The number and location of underground injection control project approvals issued by the Department of Conservation (DOC), including projects that were approved but subsequently lapsed without having commenced injection.

2. The monthly average number of pending project applications.

3. The average length of time to obtain an underground injection control project approval from the date of receipt of the complete application to the date of issuance.

4. The average amount of time to review an underground injection control project proposal by CalGEM and the average combined review time by the State Water Board and regional water quality control boards for each proposed underground injection control project.

5. The number of project proposals pending for over one year.

6. A list of pending AE packages, if any, and their status in the review process.

7. The average length of time to process an AE package and the average amount of time to review a proposed AE package by CalGEM and the average combined review time by the State Water Board and regional water quality control boards for each aquifer exemption proposal.

8. The number and description of underground injection control related violations identified.

9. The number of enforcement actions taken by DOC.

10. The number of shut-in orders or requests to relinquish permits and the status of those orders or requests.

11. The number, classification, and location of staff with work related to underground injection control.

12. The number of staff vacancies for positions associated with underground injection control.

13. Any state or federal legislation, administrative, or rulemaking changes to the Program.

14. The number of underground injection control projects reviewed for compliance with statutes and regulations in each district and a summary of findings from project reviews completed during the reporting period, including any steps taken to address identified deficiencies.

15. The number of underground injection control projects that have not been reviewed for compliance with applicable statutes and regulations within the prior two years.

16. Summary of significant milestones in the compliance schedule agreed to with the US EPA, as indicated in the March 9, 2015, letter to CalGEM and the State Water Board from the US EPA, including, but not limited to, regulatory updates, evaluations of injection wells, and AE packages.

17. Summary of activities undertaken by the underground injection control review panel established pursuant to Section 46 of Chapter 24 of the Statutes of 2015.

Contact Information

For more information about the UIC Program, visit the Program webpage: https://www.conservation.ca.gov/calgem/general_information/Pages/UndergroundinjectionControl(UIC).aspx.

For questions regarding the content of this report, contact the CalGEM Public Transparency Office at CalGEMPublicTransparencyOffice@conservation.ca.gov.

UNDERGROUND INJECTION CONTROL PROGRAM

1. UIC Projects

1.1 UIC Project Approvals

Public Resources Code section 3114, subdivision (a)(1): The number and location of underground injection control project approvals issued by the DOC, including projects that were approved but subsequently lapsed without having commenced injection.

During the reporting period, CalGEM approved one UIC project. The project was a review of an existing active UIC project to ensure full compliance with current statutes/regulations.

LOCATION (County)	# of UIC Projects Approved
Southern District Office **Los Angeles (1)**	1
Central District Office **N/A (0)**	0
Northern District Office **N/A (0)**	0
TOTAL	**1**

1.2 Pending UIC Project Applications

Public Resources Code section 3114, subdivision (a)(2): The monthly average number of pending project applications.

Pending applications are defined as those that are in the review process and have not yet received a PAL. For purposes of this report, projects are only added to the "pending" list when a project application is submitted in WellSTAR. On average, 106 UIC project applications were pending every month during the reporting period. For consistency with previous reporting, applications for existing active UIC project reviews for statutory and regulatory compliance are included in this number if they include an expansion component.

As indicated in the prior year's report, CalGEM has acted as the lead agency for California Environmental Quality Act (CEQA) permitting in Kern County from April 1, 2022, to November 1, 2022, and again from January 27, 2023, to present (See Notice to

Operators 2023-02).[1] This status remains unchanged since the end of the last reporting period. Acting in the CEQA lead agency role increases the scope and complexity of UIC project reviews. The change in CEQA lead status is discussed further in Section 5.1.3.

1.3 UIC Project Approval Timeline

Public Resources Code section 3114, subdivision (a)(3): The average length of time to obtain an underground injection control project approval from the date of receipt of complete application to the date of issuance.

Beginning from the date a UIC project application is deemed complete, 832 days was needed to complete the review of the application during this reporting period. This is more than the 638-day average during the previous reporting period. The total time from submission of the application to determination was 908 days. This is an increase from the prior report average of 764 days. For this reporting period, there was only one project approved, and the project approval timeline is based only on the one project.

UIC project applications undergo cursory reviews to ensure the dataset is complete. Districts will not start detailed technical reviews until the package is verified complete. Project applications requiring an AE are not deemed complete until receipt of AE approval by the US EPA Record of Decision is verified.

1.4 UIC Project Application Review

Public Resources Code section 3114, subdivision (a)(4): The average amount of time to review an underground injection control project proposal by CalGEM and the average combined review time by the State Water Board and regional water quality control boards for each proposed underground injection control project.

During the reporting period, the CalGEM review time for UIC project proposal was 669 days. This is a reduction from the previous average of 685 days. CalGEM review time begins the day the application is submitted and concludes when a determination is made, including if a PAL is issued, minus the Water Boards' review time. This includes, among other things, the cursory completeness check, interagency communications, as well as time spent obtaining additional data/information necessary to deem the application complete. The CalGEM review time was determined based on the

[1] In accordance with Title 14 of the California Code of Regulations (CCR) section 15096, CalGEM, as a responsible agency under CEQA will consider Kern County's Supplemental Recirculated Environmental Impact Report (SREIR) when reviewing any Notice of Intention (NOI) or UIC application (project) for oil and gas activities, or another, and reach its own conclusion on whether and how to approve the project, as defined by California Public Resources Code section 21065. Prior to reaching a decision on the project, CalGEM will consider the environmental effects of the project as shown in the SREIR. (NTO 2023-02)

approval of a single UIC project which was an existing active UIC project reported under subsection '1.1 UIC Project Approvals' of the report.

During the reporting period, the Water Boards completed a total of 22 UIC project reviews with an average time of 279 days. Project application reviews included all new and existing active UIC projects with or without an expansion component. Previous reporting by Water Boards included only new or existing UIC project reviews only if they included an expansion component. Overall, review times increased slightly from the previous year of 163 days due to the increase of large and highly complex projects which may require significant coordination with CalGEM and the operators.

The Water Boards' review begins when an application is received from CalGEM. The Water Boards' review concludes when either a No Objection, Objection, or No Intent to Comment letter is sent to CalGEM. This time includes interagency communications and staff review. CalGEM and the Water Boards' review periods may overlap or take place simultaneously.

1.5 Pending UIC Project Applications

Public Resources Code section 3114, subdivision (a)(5): The number of project proposals pending for over one year.

As of March 31, 2024, 107 UIC project proposals have been pending for over one year. Seventy-six of those 107 proposals were under CalGEM review which, when completed, will be submitted to the Water Boards. The remaining 31 UIC project proposals were under Water Boards' review. Thirteen of the 107 applications were awaiting Operator's input at either CalGEM's or the Water Boards' review stage and eight of the 107 applications are under review by CalGEM's CEQA Unit.

2. Aquifer Exemptions

2.1 Pending Aquifer Exemptions

Public Resources Code section 3114, subdivision (a)(6): A list of pending aquifer exemptions, if any, and their status in the review process.

There were 15 pending AE package proposals during the majority of the reporting period. In February 2024, the applicant operator for Round Mountain (South Area) withdrew the application, resulting in 14 current AE package proposals. In a letter dated September 16, 2021, the US EPA acknowledged the State's decision to conduct conduit analysis to assess potential fluid migration where a proposed AE area is overlain by beneficial use aquifers. The US EPA stated that the conduit analysis should be completed before submitting the AE package to the US EPA for review. The status of

the packages, including any required conduit analysis, as of March 31, 2024, is provided below.

AQUIFER EXEMPTION STATUS AS OF MARCH 31, 2024

Lynch Canyon (Lanigan)	The AE proposal was submitted to the US EPA on February 26, 2020. CalGEM and the State Water Board are responding to US EPA questions and updating documentation.
Sespe	The AE proposal was submitted to the US EPA on October 27, 2021. CalGEM is engaging in ongoing communication with the operator and US EPA in response to additional requests for information and questions from US EPA.
Cat Canyon	Conduit analysis is complete. CalGEM is working on the Conduit Remediation and Monitoring Plans with the operators and Water Boards.
Holser	The AE proposal was submitted to the US EPA on December 23, 2022. CalGEM is responding to US EPA questions and updating documentation.
Oxnard	As a result of evolving applicant operator plans to not continue injection in the area of this contemplated AE package, CalGEM formalized suspension of injection approval via a regulatory notice process for all wells in the area that were completed into a potential Underground Source of Drinking Water (USDW) zone in 2022. The State is continuing to evaluate this AE package for potential recommendation to the US EPA.
Lompoc	The AE proposal was submitted to the US EPA on December 23, 2022. CalGEM is responding to US EPA questions and updating documentation.
Midway-Sunset II (Tulare)	Conduit analysis is complete. CalGEM is working on the Conduit Remediation and Monitoring Plans with the operators and Water Boards.
Mt. Poso (Dorsey Area)	CalGEM formalized suspension of injection approval via a regulatory notice process for all wells in the area. CalGEM and the Waterboards have reviewed the AE package and provided feedback to the operators. The applicant operator is revising the application.
Kern River	Conduit analysis is complete. CalGEM is working on the Conduit Remediation and Monitoring Plans with the operators and Water Boards.

Casmalia	Injection is not currently approved outside of the previously exempted area. New operator in Casmalia contacted CalGEM in May 2023 about resuming injection in the area. An updated Area of Review (AOR) demonstrating that fluid would not exceed the AE area needs to be shown or an approved expanded AE would be required to re-initiate injection.
Deer Creek	Injection is not currently approved outside of the previously exempted area. The operator of this project has changed and the new operator is evaluating whether to proceed with this AE package.
Northeast Edison	Injection is not currently approved in this area. The AE package is still in an early stage of review by CalGEM. Central District waiting for the applicant operator's responses on feedback and additional requirements sent on May 20, 2019. As it is no longer progressing, this will be the last year that status is reported for this AE package.
North Antelope Hills	Injection is not currently approved outside of the previously exempted area. In September 2023, the applicant operator submitted an updated AE application. The Water Boards provided a response to the applicant operator in December 2023. The applicant operator is currently addressing the Water Board's questions.
Lynch Canyon D-Sands	Injection is not currently approved outside of the previously exempted area. An updated AE package and conduit analysis data were received from the applicant operator in January 2024. CalGEM reviewed these materials and sent comments to the applicant operator in April 2024.

2.2 Aquifer Exemption Review

Public Resources Code section 3114, subdivision (a)(7): The average length of time to process an aquifer exemption and the average amount of time to review a proposed aquifer exemption by CalGEM, and the average combined review time by the State Water Board and regional water quality control boards for each aquifer exemption proposal.

CalGEM review time begins the day the application package is received and

concludes the day it is submitted to the US EPA. This time includes the exchange of information through interagency communications, the public comment period, and time spent obtaining additional or missing data and information from operators. These activities continue after receipt of the State Water Board's final concurrence letter.

During the reporting period, CalGEM and the Water Boards have continued to review AE packages, including completing conduit analyses, working on Conduit Remediation and Monitoring Plans, responding to US EPA questions and updating documentation, and providing feedback to operators. However, no reviews were completed, and no proposals were submitted to the US EPA.

No US EPA approvals of AE packages were received during the reporting period.

3. Enforcement

3.1 UIC Violations

Public Resources Code section 3114, subdivision (a)(8): The number and description of underground injection control related violations identified.

During the reporting period, CalGEM identified 49 violations of its UIC regulations, up from 42 violations from last year. Beginning with the 2022-23 reporting period, CalGEM has reframed the information in this section to focus only on violations of the specific UIC regulatory requirements. CalGEM believes this approach provides more precise information in response toPublic Resources Code section 3114, subdivision (a)(8).

Previously, CalGEM completed this section of the report using compliance information drawn from its EPA 7520 form for UIC Federal Reporting System, a form used for satisfying reporting requirements distinct from those in Public Resources Code section 3114. The information assembled for the EPA 7520 form generally aggregates all types of violations involving an injection well, including not just violations of CalGEM's specific UIC regulations (found in California Code of Regulations, title 14, sections 1724.5 through 1724.13) but also violations of more generalized requirements for wellsite maintenance, idle well management, and other issues.

The number and description of the 49 UIC-related violations for the current reporting period are listed below.

UIC VIOLATIONS IDENTIFIED

CCR	Violation Description	Count
1724.7(a)	Failure to demonstrate confined injection	3
1724.10.4(a)	Failure to comply with continuous pressure monitoring	1

	requirements	
1724.11(a)	Failure to prevent surface expressions	1
1724.11(c)	Failure to immediately notify if surface expression occurs, changes, or reactivates	1
1724.12(a)	Failure to apply surface expression containment measures	1
1724.13(a)	Unauthorized injection	37
1724.13(c)	Failure to disconnect lines after loss of approval to inject	5
	Total	**49**

The three violations related to "1724.7(a)" are for failure to demonstrate that injection is confined to the approved injection zone. (Cal. Code Regs., tit. 14, § 1724.7, subd. (a).)

The one violation related to "1724.10.4(a)" was due to failure to continuously record well-specific injection pressure for a well that is approved for injection by CalGEM. (Cal. Code Regs., tit. 14, § 1724.10.4, subd. (a)(1).)

The one violation related to "1724.11(a)" is for failure to prevent a surface expression associated with a UIC project. (Cal. Code Regs., tit. 14, § 1724.11, subd. (a).)

The one violation related to "1724.11(c)" is for failure to immediately notify CalGEM if surface expression occurs, changes, or reactivates. (Cal. Code Regs., tit. 14, § 1724.11, subd. (c).)

The one violation related to "1724.12(a)" is for failure to apply surface expression containment measures. (Cal. Code Regs., tit. 14, § 1724.12, subd. (a).)

The 37 violations related to "1724.13(a)" are for unauthorized injection and failure to cease injection in the affected injection well. (Cal. Code Regs., tit. 14, § 1724.13, subd. (a).) Twenty-eight of the 37 violations for unauthorized injection were associated with the same operator.

The five violations related to "1724.13(c)" are for failure to disconnect lines after loss of approval to inject. The loss of approval to inject may result from a variety of circumstances indicating potentially elevated risks with continued injection activity, such as the well becoming idle, not performing mechanical integrity testing (MIT), a well failing MIT, any observed indications of failure in well tubing, packer, or casing, or the occurrence of visible surface damage near the well. (Cal. Code Regs., tit. 14, § 1724.13, subd. (a) and (c).)

3.2 Enforcement Actions

Public Resources Code section 3114, subdivision (a)(9): The number of enforcement

actions taken by DOC.

During the reporting period, 21 UIC-related enforcement actions were undertaken by CalGEM. All these enforcement actions were issuances of Notices of Violations (NOVs). As circumstances allow, CalGEM often uses the mechanism of a single enforcement action to address a group of multiple violations involving the same operator.

3.3 Shut-In Orders or Requests to Relinquish Permits

Public Resources Code section 3114, subdivision (a)(10): The number of shut-in orders or requests to relinquish permits and the status of those orders or requests.

Under applicable regulations, wells may be effectively "shut-in," via suspension of approval to inject, upon the occurrence of various prescribed triggering events. Some of these triggering events do not presuppose any "violation" by the operator, nor do they contemplate the issuance of an administrative order or a "request to relinquish" as a necessary step. (See, e.g., Cal. Code Regs., tit. 14, §§ 1724.6; 1724.10, subd. (i); 1724.11; 1724.13.) During the reporting period, there were 80 well shut-ins.

4. Administration

4.1 UIC Program Staffing

Public Resources Code section 3114, subdivision (a)(11): The number, classification, and location of staff with work related to underground injection control.

All staff with duties related to UIC partial or full-time were identified and calculated into whole FTE (Full Time Equivalent) positions.

CalGEM has continued to fill vacancies that DOC received as part of the 2022/2023 California State Budget to carry out UIC activities. During this reporting period, there were a significant increase in number of positions for Sacramento (HQ) due to an approved Budget Change Proposal (BCP) for CalGEM's CEQA Unit. There has been increased support for UIC-related tasks from other units as well, including Data Management and WellSTAR Programs.

DEPARTMENT OF CONSERVATION

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
Sacramento (HQ)	Supervising Oil & Gas Engineer	1 (0.40)	0 (0)
	Senior Oil & Gas Engineer (UIC)	1 (1.00)	0 (0)

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
	Associate Oil & Gas Engineer (UIC)	8 (8.00)	0 (0)
	Associate Oil & Gas Engineer (SB4 Well Stimulation Program)	4 (0.20)	0 (0)
	Associate Oil & Gas Engineer (WellSTAR Program)	1 (0.25)	0 (0)
	Associate Oil & Gas Engineer (Data Management Program)	1 (0.40)	0 (0)
	Research Data Specialist I (Data Management Program)	1 (0.10)	0 (0)
	Research Data Specialist II (Data Management Program)	2 (0.30)	0 (0)
	Research Data Analyst II (Data Management Program)	1 (0.05)	0 (0)
	Research Data Supervisor II (Data Management Program)	1 (0.05)	0 (0)
	Management Services Technician (CEQA)	0 (0)	1 (0.05)
	Staff Service Analyst (CEQA)	2 (0.30)	0 (0)
	Associate Government Program Analyst (CEQA)	1 (0.60)	1 (0.05)
	Associate Environmental Planner (CEQA)	1 (0.60)	0 (0)
	Environmental Planner (CEQA)	1 (0.40)	0 (0)
	Environmental Scientist (CEQA)	4 (1.05)	0 (0)
	Senior Environmental Scientist Specialist (CEQA)	2 (0.35)	0 (0)
	Senior Environmental Scientist Supervisor (CEQA)	2 (0.75)	2 (1.00)
	Environmental Program Manager (CEQA)	1 (0.20)	0 (0)
	Engineering Geologist (CEQA)	0 (0)	1 (0.05)

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
	Engineering Geologist (WellSTAR Program)	1 (0.25)	0 (0)
	Engineering Geologist (Data Management Program)	1 (0.80)	0 (0)
	Senior Analyst (CEQA Contractor)	3 (2.25)	0 (0)
	Analyst (CEQA Contractor)	6 (2.40)	0 (0)
	Attorney (Legal)	1 (0.50)	0 (0)
	Attorney III (Legal)	1 (0.50)	0 (0)
	HQ TOTAL	**48 (21.70)**	**5 (1.15)**
Long Beach (Southern District)	Supervising Oil & Gas Engineer	3 (0.50)	0 (0)
	Senior Oil & Gas Engineer (Supervisor)	7 (1.75)	0 (0)
	Senior Oil & Gas Engineer (Specialist)	1 (0.95)	1 (0.8)
	Associate Oil & Gas Engineer	17 (8.50)	0 (0)
	Engineering Geologist	15 (3.00)	1 (0.2)
	Energy & Mineral Resources Engineer	1 (0.20)	0 (0)
	SOUTHERN DISTRICT TOTAL	**44 (14.9)**	**2 (1.0)**
Sacramento, Ventura, Orcutt (Northern District)	Senior Oil & & Gas Engineer (Supervisor)	6 (1.88)	1 (0.40)
	Associate Oil & Gas Engineer	14 (5.2)	0 (0)
	Engineering Geologist	19 (3.90)	8 (2.80)
	Energy & Mineral Resources Engineer	2 (0.25)	1 (0.10)
	Office Assistant (Typist)	1 (0.02)	1 (0.02)
	Office Technician (Typist)	2 (0.06)	1 (0.03)
	Associate Governmental Program Analyst	1 (0.03)	0 (0)
	NORTHERN DISTRICT TOTAL	**45 (11.34)**	**12 (3.35)**
Bakersfield (Central District)	Supervising Oil & Gas Engineer	4 (1.35)	0 (0)

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
	Senior Oil & Gas Engineer (Supervisor)	13 (4.60)	0 (0)
	Senior Oil & Gas Engineer (Specialist)	1 (1.00)	0 (0)
	Associate Oil & Gas Engineer	36 (17.70)	1 (0.20)
	Engineering Geologist	35 (7.40)	1 (0.20)
	Staff Services Manager I	1 (0.15)	0 (0)
	Staff Services Manager II	1 (0.05)	0 (0)
	Staff Services Analyst	1 (0.50)	0 (0)
	Office Technician (Typist)	3 (0.40)	0 (0)
	CENTRAL DISTRICT TOTAL	**95 (33.15)**	**2 (0.40)**
	TOTAL – ALL DISTRICTS & HQ	**232 (81.09)**	**21 (5.90)**

Note: Figures shown outside parentheses are the number of staff per job classification contributing partial times performing UIC-related tasks and the current CALGEM organizational chart vacancies.

* FTE: Full-Time Equivalent figures inside parentheses represent the total work hours of staff -spent performing UIC-related tasks during the reporting period- converted into the equivalent number of full-time positions for a specified period.

STATE AND REGIONAL WATER BOARDS

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
State Water	Senior Engineering Geologist	1	0
Board (Sacramento)	Engineering Geologist / Water Resources Control Engineer	7	0
	Attorney	1	0
	STATE WATER BOARD TOTAL	**9**	**0**
Central Valley	Senior Engineering Geologist	1	0
Regional Water Board (Fresno)	Engineering Geologist / Water Resources Control Engineer	10	0
	REGIONAL BOARD TOTAL	**11**	**0**

LOCATION	JOB CLASSIFICATION	# of POSITIONS (FTE)*	# of VACANCIES (FTE)*
Central Coast Regional Water Board (San Luis Obispo)	Senior Water Resources Control Engineer	1	0
	Engineering Geologist	4	2
	REGIONAL BOARD TOTAL	**5**	**2**
Los Angeles Regional Water	Engineering Geologist / Water Resources Control Engineer	3	0
	REGIONAL BOARD TOTAL	**3**	**0**
	TOTAL – STATE & REGIONAL WATER BOARDS	**28**	**2**

Note: Figures for the Water Boards above are dedicated full-time to UIC.

4.2 UIC Program Vacancies

Public Resources Code section 3114, subdivision (a)(12): The number of staff vacancies for positions associated with underground injection control.

See tables above in section 4.1 UIC Program Staffing.

5. Statutes & Regulations

5.1 Statutory or Regulatory Changes to the UIC Program

Public Resources Code section 3114, subdivision (a)(13): Any state or federal legislation, administrative, or rulemaking changes to the Program.

5.1.1 Federal Legislation

Nothing to report.

5.1.2 State Legislation

5.1.2.1 Assembly Bill 631

Assembly Bill (AB) 631 (Hart, Ch. 337, Statutes of 2023) authorizes CalGEM to enforce oil and gas project compliance through enhanced criminal penalties, Superior Court civil penalties, injunctive relief, increased prosecution capacity in coordination with local government, and cost recovery.

5.1.2.2 Assembly Bill 1167

AB 1167 (Carrillo, Ch. 359, Statutes of 2023) requires a person who acquires the right to operate a well or production facility to file with the State Oil and Gas Supervisor a bond for the well or production facility in an amount determined by the Supervisor to be sufficient to cover, in full, all costs of plugging and abandonment and site restoration.

5.1.2.3 Assembly Bill 1526

AB 1526 (Committee on Natural Resources, Ch. 848, Statutes of 2023) extends, until October 1, 2029, the requirement for the Department to report annually to the Legislature on its UIC Program, among other provisions.

5.1.3 Administrative

On January 26, 2023, the Court of Appeal for the Fifth District suspended operation of Kern County's Oil and Gas Ordinance, Kern County Code Chapter 19.98, pending further order of the Court of Appeal. This resulted in CalGEM again becoming the CEQA lead agency for reviewing oil and gas applications from Kern County operators.

On March 7, 2024, the Fifth District Court of Appeal found Kern County had failed to follow CEQA with regard to setbacks, agricultural easements and groundwater impacts. This appellate ruling will require Kern County staff to readopt a zoning ordinance, if it hopes to reassert local control of oil and gas permitting.

As a result, CalGEM continues to act as lead agency and has focused on increasing the efficiency of environmental reviews while strengthening the thoroughness of environmental impact analysis consistent with applicable laws and regulations.

5.1.4 UIC Regulatory Changes

5.1.4.1 Cost Estimate Regulations for Oil and Gas Operations

SB 551 (Jackson, Ch. 774, Statutes of 2019) requires CalGEM to set criteria for the submission of operator cost estimates for the plugging and abandonment of wells, decommissioning of attendant facilities, and site remediation associated with California oil and gas operations.

On August 18, 2023, the Cost Estimate Regulations for Oil and Gas Operations were posted in the Office of Administrative Law Notice Register. This began a 45-day public comment process. Subsequent modifications to the text of the proposed regulations initiated two 15-day public comment periods, with the second 15-day public comment period ending on January 17, 2024. Final filing with the Office of Administrative Law is pending.

5.2 CalGEM UIC Projects Reviewed in Each District

Public Resources Code section 3114, subdivision (a)(14): The number of underground injection control projects reviewed for compliance with statutes and regulations in each district and a summary of findings from project reviews completed during the reporting period, including any steps taken to address identified deficiencies.

Consistent with its Revised Memorandum of Agreement (Revised Memorandum of Agreement 2021), CalGEM coordinates with the Water Boards' staff in the review of existing active UIC projects to ensure compliance with the current statutory and regulatory requirements. This review includes project file examination of each active project to determine completeness and updating necessary documentation required by regulation, in addition to updating the terms and conditions of the PAL to ensure each project is effectively preventing damage to life, health, property, and natural resources. One Class II UIC project application was approved by CalGEM during this reporting period.

DISTRICT	Reviews Complete	Under Review In WellSTAR
Southern	1	57
Central	0	73
Northern	0	63
TOTAL	**1**	193

As of March 31, 2024, CalGEM has 193 active UIC projects under review in WellSTAR. This includes 47 projects for which the districts and HQ have agreed that the review is technically complete and have been forwarded to the Water Boards for their review.

As of March 31, 2024, the Water Boards have completed their review and issued No Objection Letters for 28 UIC projects, including both approved and under-review UIC projects. Sixteen of these projects are still under review in WellSTAR.

Summary of Findings and Steps to Address Deficiencies:

For project reviews completed during this reporting period, deficiency letters were sent to operators requesting missing data. The purpose of these letters is to ensure that all project data submitted by operators is in compliance with 2019 UIC regulatory requirements. Commonly requested data for these projects included:

- Updated Zone of Endangering Influence (ZEI) calculations based on empirically observed parameters (including actual injection intervals from radioactive (RA) surveys, observed reservoir pressures, and injection rates).

- Updated isobar maps with validated pressure data.
- Material Balance / Voidage replacement ratio (VRR) graphs and data (historical & forecasted where available).
- Detailed descriptions of the overlying USDW's and method of determination.
- Detailed explanations of geological features and impacts on fluid flow/migration (e.g., faults).
- Updated and accurate wellbore diagrams.
- Impacts of overlying Area of Review (AOR) as well as injection/production interference effects.
- Updating all figure/graphs/tables/maps to fall into compliance with CCR section 1724.7.
- Remediation strategies or detailed monitoring plans identifying operator proposals to ensure protection of USDW's where conduits exist via wellbores.

5.3 UIC Projects Not Yet Reviewed for Compliance

Public Resources Code section 3114, subdivision (a)(15): The number of underground injection control projects that have not been reviewed for compliance with applicable statutes and regulations within the prior two years.

As of March 31, 2024, 569 UIC projects have not been reviewed for compliance with applicable statutes and regulations within the prior two years, down from 573 reported last year. CalGEM has made at least initial data requests on most of the 771 active UIC projects.

5.4 UIC Summary of Significant Milestones

Public Resources Code section 3114, subdivision (a)(16): Summary of significant milestones in the compliance schedule agreed to with the US EPA, as indicated in the March 9, 2015, letter to CalGEM and the State Water Board from the US EPA, including, but not limited to, regulatory updates, evaluations of injection wells, and aquifer exemption applications.

5.4.1 Aquifer Exemptions

CalGEM and the State Water Board continue to provide the US EPA and the California Legislature with regular updates on the progress of the AE process.

In a letter dated September 16, 2021, the US EPA expressed concern with California's pace in fulfilling its obligations specified in the March 2015 compliance plan. The letter requested a revised schedule for submitting the nine outstanding AE packages that are

not in compliance with the Safe Drinking Water Act (SDWA) to US EPA by no later than September 30, 2022. Without active injection within the proposed AE boundaries, the Oxnard and Mount Poso (Dorsey Area) AE packages are no longer out of compliance with the SDWA.

An initial schedule for completing the seven remaining packages was submitted to US EPA in December 2021. The State has been largely able to stay on track with commitments made to US EPA, and where it has not, it has provided regular communication to US EPA on progress overcoming delays.

Following is a summary update of the seven AE packages:

- Four AE packages have been submitted to the US EPA, and include Lynch Canyon-Lanigan Sands, Sespe, Lompoc, and Holser AE packages. The transmittal letters were sent to the US EPA regarding the Lynch Canyon-Lanigan Sands Oil Field on February 26, 2020; the Sespe Oil Field on October 27, 2021; the Holser Oil Field on December 23, 2022; and the Lompoc Oil Field on December 23, 2022.
- Three AE packages (Midway Sunset, Kern River, and Cat Canyon AE packages) are yet to be submitted to the US EPA. Conduit analyses for the mentioned AE packages have been finalized by CalGEM, the Water Boards and operators. Currently, operators are developing Remediation and Monitoring plans related to these conduit analyses, pending review by CalGEM and the Water Boards. Additional information on each AE package is provided in Section 2.1.

5.4.2 Regulatory Updates

The regulatory changes discussed in the March 9, 2015, letter to CalGEM and the State Water Board from the US EPA were achieved via two rulemaking actions completed in 2016 and 2019, respectively. There were no regulatory developments during this reporting period specifically related to the compliance schedule milestones discussed in the March 9, 2015, letter.

5.4.3 Evaluations of Injection Wells

During the reporting period, CalGEM continued its regulatory oversight of underground injection operations consistent with applicable law, taking appropriate actions as necessary to prevent damage to USDWs and other natural resources. See Section 3.2 for details of enforcement actions.

During the reporting period, the Central Coast Regional Water Quality Control Board issued a 13267 order to Aera Energy LLC in the San Ardo Oil Field requiring that they investigate potential impacts to beneficial use aquifers due to a failed MIT in an injection well. The Central Coast Regional Water Quality Control Board also worked with

CalGEM and oil field operators to investigate six other UIC wells that failed MIT between April 1, 2023, and March 31, 2024. The wells were located in the San Ardo and Cat Canyon Oil Fields.

5.5 UIC Review Panel

Public Resources Code section 3114, subdivision (a)(17): Summary of activities undertaken by the underground injection control review panel established pursuant to Section 46 of Chapter 24 of the Statutes of 2015.

Pursuant to Senate Bill 83 (Committee on Budget and Fiscal Review, Ch. 24, Statutes of 2015), the Secretary of the Natural Resources Agency and the Secretary for Environmental Protection appointed an independent review panel to evaluate the regulatory performance of the administration of the UIC Program and make recommendations on how to improve its effectiveness by evaluating resource needs, statutory or regulatory changes, as well as Program organization.

Following the requirements of the legislation, a Panel was developed and comprised of a diverse group of individuals with expertise and scientific background in geology, toxics, oil and gas development, public health, and the environment, as well as representatives from agricultural and environmental justice perspectives.

Additionally, the Panel was required to seek input from a broad range of stakeholders with a diverse range of interests affected by state policies and the general public.

The Panel had the following tasks:

- Observe, comment on, and review the April 2020 Peer Review conducted by the Groundwater Protection Council, a nonprofit organization whose members consist of state groundwater and UIC regulatory agencies.
- Seek input on the findings of the Peer Review from a broad range of stakeholders and the public.
- Issue an independent final evaluation and recommendations to improve the regulatory Program.

The Panel's discussions and process began in 2018 and were facilitated by the Lawrence Berkeley National Laboratory (LBNL).

Funds supporting the SB 83 Panel work on the previous contract with LBNL were exhausted and the contract expired in June 2021. In June of 2022, CalGEM entered a new contract with LBNL to complete the work of the Panel that included preparing a written evaluation with recommendations in accordance with SB 83 aimed to improve the UIC regulatory Program. This contract expired March 31, 2024.

As of the expiration of the contract on March 31, 2024, CalGEM did not receive the contracted deliverable to fulfill this statutory requirement and did not pursue a third contract with LBNL. It was decided at that juncture it was not prudent to enter into a third contract with LBNL to allow for completion of recommendations because significant improvements and changes to the UIC program had been made since the SB 83 panel work completed in 2018, making any subsequent recommendations likely no longer relevant. Further, the spirit of the statute to evaluate the regulatory performance and administration of the UIC Program and make recommendations on how to improve its effectiveness by evaluating resource needs, statutory or regulatory changes, as well as Program organization, had been met through other recent efforts:

- On April 1, 2019, CalGEM adopted updates to the UIC regulations, providing a more rigorous and comprehensive regulatory regime to address previous short comings in the law.
- Shortly after the onset of the new regulations, the performance of CalGEM's administration of the UIC Program was evaluated in a robust audit and an independent scientific review of the UIC Program during the end of 2019 and early 2020. The audit was performed by the Department of Finance, Office of Audits and Evaluations (DOF) and the scientific review was performed by Lawrence Livermore National Laboratory. In response to the DOF audit, CalGEM has developed and implemented corrective actions, written over ten standard operating procedures, and continues to prioritize consistent oversight of the UIC program statewide.

APPENDIX A – REFERENCES & DATA SOURCES

CalGEM

- CalGEM Statutes and Regulations (January 2024):

https://www.conservation.ca.gov/index/Pages/California-Geologic-Energy-Management-Division-Statutes-and-Regulations.aspx

- Revised Memorandum of Agreement between CalGEM (referred to as the Department of Conservation Division of Oil, Gas, and Geothermal Resources ("Division")) and the State Water Board (last updated with the addition of a new "Attachment 3" circa December 2021):

https://www.conservation.ca.gov/calgem/general_information/Documents/2020.10.12_Revised_MOA_with_the_State_Water_Board.pdf

- Well Statewide Tracking and Reporting System (WellSTAR), an electronic database used to maintain, monitor, and track well information:

https://www.conservation.ca.gov/calgem/for_operators/Pages/WellSTAR.aspx

- Notice to Operators 2022-06. Kern County Final Supplemental Recirculated Environmental Impact Report Suspension Lifted; Guidance for CEQA Compliance for Proposed Operations in Kern County. November 16, 2022.

https://www.conservation.ca.gov/calgem/for_operators/Documents/NOTICE%20TO%20OPERATORS%202022-06%20Kern%20SREIR%20ADA.pdf

- Notice to Operators 2023-02. Notice of Appellate Order Regarding Kern County Code Chapter 19.98; Guidance for CEQA Compliance for Proposed Operations in Kern County. February 2, 2023:

https://www.conservation.ca.gov/calgem/for_operators/Documents/2023-02%20NOTICE%20TO%20OPERATORS%20Kern%20SREIR%20ADA.pdf

WATER BOARDS

- Bi-weekly UIC Project Review Status Reports:

https://geotracker.waterboards.ca.gov/uic_project_tracking_report

- GeoTracker, a public database used to maintain, monitor, and track a variety of groundwater data, including UIC well information:

https://geotracker.waterboards.ca.gov/

- State Water Board Oil and Gas Unit's Aquifer Exemption Status, an internal Excel workbook specifically used to track the progress of aquifer exemption application reviews, interagency communication, and decision milestones.

APPENDIX B – PUBLIC RESOURCES CODE § 3114

§ 3114. (a) By July 30, 2019, and annually thereafter, the Department of Conservation, in consultation with the State Water Resources Control Board, shall report to the fiscal and relevant policy committees of the Legislature on the Underground Injection Control Program. The report shall include, but is not limited to, all the following about activities in the previous 12 months:

(1) The number and location of underground injection control project approvals issued by the department, including projects that were approved but subsequently lapsed without having commenced injection.

(2) The monthly average number of pending project applications.

(3) The average length of time to obtain an underground injection control project approval from date of receipt of complete application to the date of issuance.

(4) The average amount of time to review an underground injection control project proposal by the division and the average combined review time by the State Water Resources Control Board and regional water quality control boards for each proposed underground injection control project.

(5) The number of project proposals pending for over one year.

(6) A list of pending aquifer exemptions, if any, and their status in the review process.

(7) The average length of time to process an aquifer exemption and the average amount of time to review a proposed aquifer exemption by the division and the average combined review time by the State Water Resources Control Board and regional water quality control boards for each aquifer exemption proposal.

(8) The number and description of underground injection control related violations identified.

(9) The number of enforcement actions taken by the department.

(10) The number of shut-in orders or requests to relinquish permits and the status of those orders or requests.

(11) The number, classification, and location of staff with work related to underground injection control.

(12) The number of staff vacancies for positions associated with underground injection control.

(13) Any state or federal legislation, administrative, or rulemaking changes to the Program.

(14) The number of underground injection control projects reviewed for compliance with statutes and regulations in each district and a summary of findings from project reviews completed during the reporting period, including any steps taken to address identified deficiencies.

(15) The number of underground injection control projects that have not been reviewed for compliance with applicable statutes and regulations within the prior two years.

(16) Summary of significant milestones in their compliance schedule agreed to with the United States Environmental Protection Agency, as indicated in the March 9, 2015, letter to the division and the state board from the United States Environmental Protection Agency, including, but not limited to, regulatory updates, evaluations of injection wells, and aquifer exemption applications.

(17) Summary of activities undertaken by the underground injection control review panel established pursuant to Section 46 of Chapter 24 of the Statutes of 2015.

(b) This section shall become inoperative on October 1, 2029, and, as of January 1, 2030, is repealed.

(Amended by Stats. 2023, Ch. 848, Sec. 1. (AB 1526) Effective January 1, 2024. Section inoperative October 1, 2029. Repealed as of January 1, 2030, by its own provisions.)

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