



DEPARTMENT OF CONSERVATION

Managing California's Working Lands

Division of Oil, Gas, & Geothermal Resources

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February 18, 2011

The Honorable Bob Blumenfield
Committee Chair
Budget Conference Committee
State Capitol
Room 6026
Sacramento, CA 94249-0040

The Honorable Mark Leno
Committee Chair
Budget Conference Committee
State Capitol
Room 5100
Sacramento, CA 94248-0001

Dear Committee Chairs of the Senate and Assembly:

DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES FIRST REPORT TO THE LEGISLATURE ON THE UNDERGROUND INJECTION CONTROL PROGRAM PURSUANT TO SB 855 (2010)

SB 855 (Committee on Budget and Fiscal Review, Chapter 718, Statutes of 2010), requires the Department of Conservation's (Department) Division of Oil, Gas, and Geothermal Resources (Division) to report annually on the Division's Underground Injection Control Program (UIC), and specifically, the Work Plan developed to assess the UIC program. The Division's Work Plan was developed to address enforcement inconsistencies in the UIC program, to initiate an assessment of the program and to address the UIC program's assessment findings. In particular, the legislation requires the Department to report on the following areas: permitting, enforcement, staffing, any changes to the program's State and federal mandates, and the Work Plan assessment findings.

The Division is a regulator responsible for preventing damage to life, health, property, and natural resources, while also encouraging the wise development of oil, gas, and geothermal resources to increase the ultimate recovery of underground hydrocarbons and geothermal resources. Accordingly, our mission is two-fold: (1) enforcement of existing statutes and regulations both through state mandates and federal primary authority over Class II injection wells for Enhanced Oil Recovery granted by the United

States Environmental Protection Agency (US EPA); (2) permitting of all drilling, reworks, and abandonment for all wells, including orphan and idle wells in California.

In 2009, the Division received 6,959 requests for permits to drill onshore and offshore in state waters for all types of well work. The number of permits issued, including new wells drilled, rework of existing wells, plugging and abandonments and supplementary was 6,909. (Source: 2009 Annual Report of the State Oil & Gas Supervisor). This report will address only injection permits through the Division's UIC Program.

Background- Injection Projects and Injection Permits:

Injection wells have been an integral part of California's oil and gas operations for over 50 years. There are nearly 25,000 oilfield injection wells operating in the State. These wells are used to increase oil recovery, and to safely dispose of the salt and fresh water produced with oil and natural gas. About 72 percent of California's oil production is the result of Enhanced Oil Recovery (EOR) methods such as steam flood, water flood, and natural gas injection.

Injection wells are classified by the US EPA into six classes according to the type of fluid they inject and where the fluid is injected. In California, Class II injection wells (fluids associated with oil and natural gas production operations) are regulated by the Division under provisions of the state Public Resources Code in conjunction with the federal mandates from the SDWA. State regulations, beginning at California Code of Regulations Section 1724.6 *et seq.*, were designed to ensure that injected fluids are confined to the project area and zone, and that formation pressures are not exceeded to the extent that damage occurs.

In 1983, the Division received US EPA primary authority, *primacy*, to regulate Class II wells. The Division's UIC program is monitored by the US EPA. The main features of the UIC program include permitting, inspection, enforcement, mechanical integrity testing, plugging and abandonment oversight, data management, and public outreach. In accordance with the 1983 primacy agreement between the Division and the US EPA, the Division's Class II program is compensated annually based on the number of Class II wells. The Division has received close to \$500,000 from the US EPA in each of the past three years. The reimbursement amount is based upon the number of Class II wells in the UIC program.

Operators and owners of Class II injection wells must file for a permit with the Division before any drilling, well re-work, or plugging and abandonment can take place. Permits to drill are sought from the Division by submitting a Notice of Intent. When a new project seeks project approval, the project is approved before individual permits can be issued. The proposed injection project is evaluated by Division engineers and reviewed by the appropriate Regional Water Quality Control Board.

Permitting: Injection

Since it has been less than four months since the signing of the 2010-2011 Budget, the Division wants to provide a baseline for the data provided in our first report, as well as those in coming years through 2015. Data provided below is from October 1, 2009 to September 30, 2010 pursuant to the Division's annual reporting cycle to the US EPA under the authority of the Safe Drinking Water Act (SDWA). For your convenience, a copy of the report sent to the US EPA in December 2010 is enclosed.

Division Responses to Items 1 through 4 as required in SB 855:

- (1) **Total Number of Individual Injection Well Permits Issued 10/1/09 - 9/30/10: 1,951 (Please note that this is for well permits, not project approval)**
 - a. The total includes Salt Water Disposal (SWD), EOR, and new and existing wells (re-works; re-drills).

- (2) **Average Length of Time to Obtain a Permit From Date of Application to Date of Issuance 10/1/09-9/30/10: Varies from Districts 1 through 6**
 - a. By statute, the State Oil & Gas Supervisor has ten working days to approve or deny requests for drilling permits, or the permits shall be deemed approved. When an application for a permit cannot be vetted through technical review in working ten days, the Division sends a notice stating that the application is under review. The notice extends the 10-day period until the technical review is completed.
 - b. Statute does not provide a deadline for approving an injection project for which drilling permits are sought. All proposed injection projects must have an evaluation of the geology, engineering, and all wells within the project area to confirm the confinement of the injection fluid to the intended zone. This often requires reviewing hundreds or thousands of individual well casing diagrams to make a final determination of sound engineering in UIC projects.
 - c. When UIC project approval is required, an applicant generally submits the project application in advance of notices or applications for individual well permits.
 - d. The Division's busiest districts are Bakersfield (District 4) and Cypress (District 1).

Bakersfield issues the vast majority of permits in the period of eight to ten days after the applications are submitted. The exceptions are permits held in abeyance due to the engineering review for new UIC projects. Project review takes place first, and once completed, permits are issued. There are currently 48 new UIC projects under review in Bakersfield.

Cypress has had a more severe backlog in the past year due to insufficient staffing and the complexities of evaluating old fields and wells in an urban setting. As of this week, the only permits held in abeyance in this District are pending due to new projects that are under review. There are currently 69 new UIC projects under review in Cypress.

Statewide, there are currently 137 UIC projects under review by the Division.

- e. The Division's UIC Project Manager position in Sacramento was filled effective January 15, 2011. Since that time, the new UIC Manager has begun to gather data to track when UIC project applications are submitted to the Division's District offices, reviewed for completeness, and to note the date sent to Division Headquarters for review.

(3) Total UIC Permit Violations 10/1/09-9/30/10: 843 in a total of 841 wells

- a. Violations can range from untimely surveys (monitoring and reporting) to inspection violations.
- b. During inspections, the Division found 84 SWD and 205 EOR violations.
- c. The majority of violations were reported on non-compliance with monitoring and reporting requirements.
- d. The final page of the US EPA UIC reporting document, under the heading, "Part IV: Quarterly Exception List," identifies the operators and types of violations and enforcement from October 1, 2009 to September 30, 2010.

(4) Total UIC Enforcement Actions Taken 10/1/09-9/30/10: 674 in a total of 628 wells

- a. In addition to the above enforcement actions taken, 12 wells were reported to the US EPA as "Significant Noncompliance." These are wells at the Springfield Unit located in Huntington Beach and operated by Angus Petroleum Company. The due process matter is before a State court. Until the due process matter is resolved in state court, complicated further by a federal bankruptcy proceeding for which the state is a non-party but nonetheless exposed to federal discovery requirements, the Division cannot proceed with its civil process for enforcement. Additionally, the operator is seeking UIC Project Approval.

Response to Item Number (5) of SB 855: New UIC Staff Positions & Division Staffing Overall

The Division's UIC program has a total of 28 staff, having gained 17 new positions upon the signing of the Budget in October as follows:

Job Classification	Number of Positions
Senior Oil & Gas Engineer	2.0 (Hired)
Associate Oil & Gas Engineer	8.0
Energy & Mineral Resources Engineer	4.0
Environmental Scientist	1.0 (Hired)
Staff Counsel IV	1.0
Staff Services Manager	1.0 (Hired)

Hiring Freeze

Effective August 31, 2010, the Office of Governor Schwarzenegger notified all State agencies and departments under his direct executive authority to cease hiring employees. Recognizing the need to hire staff to fulfill the Division's State and federal mandates, the Department, on behalf of the Division, immediately sought exemptions from the hiring freeze. During the freeze, the Division focused on giving the necessary civil service exams for the Senior and Associate Oil & Gas Engineer classifications. It was necessary to create new civil service lists.

The Division has experienced some difficulty filling vacancies with individuals possessing the skills necessary for key management, Senior, and Associate Oil & Gas Engineer positions. In 2010, the Division saw unprecedented retirements. In the interim, positions remained vacant. The Division is challenged by higher salaries in the private sector, internal candidates without the necessary skills to promote, and expired or inadequate civil service lists. It took months to compile a Senior Oil & Gas Engineer exam to generate a list of eligible candidates before interviewing in December to fill six critical vacancies. However, the Division and Department continue to make this a top priority.

In January, the Division was able to hire the following six Senior Oil & Gas engineer positions:

- (1) UIC Program Manager
- (2) **Monitoring & Compliance Unit Manager (new position)**
- (3) **Cypress (District 1) UIC Senior (new position)**
- (4) Headquarters Facilities Manager
- (5) Sacramento District Deputy
- (6) Bakersfield (District 4) UIC Senior

At present, the Division has 157 staff positions at its Sacramento Headquarters office, six oil and gas Districts, and two geothermal offices. Of the 157 positions, 55 are non-engineering staff positions. Roughly one-quarter of the Division's engineering staff positions remain vacant as of January 31, 2011.

Division Engineering Staff Vacancies:

As of January 31, 2011, the Division has the following vacancies:
Cypress (District 1) Deputy – Supervising Oil & Gas Engineer – 1
UIC Associate Oil & Gas Engineers (new positions) – 8
UIC Energy & Mineral Resources Engineers (new positions) – 4
Associate Oil & Gas Engineers – 4
Energy & Mineral Resources Engineers – 5

Total Current Engineering Staff Vacancies on 1/30/11: 22 (12 new UIC positions vacant)

As stated above, the Division has 157 staff positions, of which 55 are non-engineering. Of the 102 technical positions throughout the Division, current vacancies are at about 22 percent of the Division's total engineering staff positions.

Response to Item Number (6) of SB 855: Legislative, Administrative, or Rulemaking Changes

There have been no legislative, administrative, or rulemaking changes to the Division's UIC program in either State or federal mandates.

Response to Item Number (7) of SB 855: The Assessment

The UIC Work Plan identified the need to conduct an assessment of the Division-wide UIC Program for nearly 25,000 oilfield injection wells and 792 active injection projects statewide. The assessment must take the following concerns into consideration to help develop a priority list:

- Risk to the public;
- Risk to health and safety;
- Risk to property;
- Risk to natural resources; and
- Risk to litigation.

The assessment is to determine the possible shortcomings or inconsistencies in the Division's UIC program. To accomplish the assessment of the program, the Monitoring & Compliance Unit was created to perform a peer review. The unit is comprised of one Senior Oil & Gas Engineer and three Associate Oil & Gas Engineers. The new Senior Oil & Gas Engineer overseeing this unit began February 1, 2011. However, the three Associate Oil & Gas Engineer positions cannot be hired until the Associate Oil & Gas Engineer civil service list is certified by the State Personnel Board (SPB). It is expected that a list will be certified by mid-February, which would make it possible to interview for all Associate vacancies by the first week of March 2011.

Once the Monitoring & Compliance team of four engineers is in place, the highest priority issues will be addressed first. Based upon known current conditions and taking into consideration the urban environment, the injection projects located in the Cypress District likely have the highest priority. The district has approximately 160 injection projects, which includes nearly 1,700 injection wells. The Bakersfield District is the next highest priority. Bakersfield has approximately 430 injection projects, which include over 21,000 injection wells.

Since the Division's engineering staff is Bargaining Unit 9 members, they remain furloughed **three** self-directed days a month. The Division's management and administrative staff are not furloughed, but are required to take 1 day off per month, through the Personal Leave Program.

Overtime:

Since the furloughs began, the Division has approved overtime for on-call field staff only. This is necessary to fulfill mandatory field work that occurs 24 hours per day, seven days a week for purpose of enforcing laws and regulations. Overtime is compensated for with Compensatory Time Off (CTO), not wages. The Division does not have approval for staff overtime on permitting. In essence, this creates a situation in which staff are potentially out of the office even more frequently than the 3 furloughed days each month.

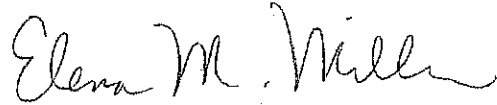
In closing, the Division developed an initial UIC program Work Plan to support the need for the 17 additional UIC program positions. The first phase of the plan, staffing, is not yet completed, which is necessary to begin the UIC program assessment. The Division estimates that it will be at least March 2011 before the remaining Associate Oil & Gas and Energy & Mineral Resources Engineer positions are filled. Once staffing is accomplished, the Division will embark on beginning the UIC assessment. This is a high priority to the Division and the Department.

A final report that lists the results of the assessment, including both the shortcomings and adequacies of the UIC program, would be prepared within 9 to 12 months of compiling the peer review team. The final report will include recommendations for improving the Division's UIC program, listing steps to be taken to bring the program into compliance with the requirements of the US EPA and the SDWA, as well as applicable state laws and regulations.

Thank you for this opportunity to report on the UIC Program to the Legislature. If you have additional questions, please contact Marni Weber, Assistant Director, Office of Governmental and Environmental Relations, at (916) 445-8733.

Honorable Bob Blumenfield and Mark Leno
February 18, 2011
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Sincerely,

A handwritten signature in cursive script that reads "Elena M. Miller". The signature is written in dark ink and is positioned above the typed name.

Elena M. Miller
State Oil & Gas Supervisor

Enclosure.

cc: Derek Chernow, Acting Director, Department of Conservation
Mami Weber, Assistant Director, Office of Governmental and Environmental Relations