STATE OF CALIFORNIA—RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
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September 28, 1982

Mr. Nathan Lau
U.S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Dear Mr. Lau:

Enclosed are the responses of the Division of Oil and Gas to your most recent questions concerning this Division's application for Class II Primacy in the Underground Injection Control Program.

Also enclosed is a letter of certification from the Attorney General's Office.

Sincerely,

Simon Cordova
for M. G. Mefferd
State Oil and Gas Supervisor

Enclosures

1. COMMENT:

The SDWA mandates that the State protect waters of 10,000 mg/l TDS or less. Neither the term "fresh water" nor the term "water for domestic use," is defined in the State application and it is not clear that these terms are synonymous with water of 10,000 mg/l of TDS or less. By these terms the CDOG, as explained in the application, is "to protect any waters that a water quality control agency" (SWRCB?) "determines to be usable." However, there is no assurance that all water with 10,000 mg/l TDS or less will be defined as "usable."

The State should furnish a copy of either the MOA between the CDOG and the SWRCB or some other document or explanation to clarify the relationship between the two agencies in determining what waters are usable, and how SWRCB defines the term "usable" in actual practice. (A.2)

RESPONSE:

CDOG itself has the authority to protect "water suitable for irrigation or domestic purposes" (Sections 3106 and 3224 of the California Public Resources Code). As a part of the 1425 application, specifically in the Memorandum of Agreement (MOA), CDOG has committed itself to the protection of underground sources of drinking water (Part II.A of the MOA) which has the same definition as the Federal UIC regulations (Part II.J.4 of the MOA). The Attorney General Statement accompanying this set of responses (Attachment #1) to the final EPA comments certifies that the commitment is within CDOG authority. Waters of 10,000 TDS mg/l or less fall within the meaning of "freshwater" or " water suitable for irrigation or domestic purposes".

A copy of the recently updated agreement between CDOG and the SWRCB is provided (Attachment #2). The SWRCB may impose stricter requirements than those in CDOG permits through the issuance of separate Waste Discharge Requirements (under the State's Porter-Cologne Act), which CDOG would enforce.

2. COMMENT:

As we understand the State permitting process, the applicant submits a permit application requesting approval for an injection project or for an individual well. If the application is approved, the applicant will be issued a "permit" for the project. However, in the California process it is <u>not</u> clear if there is an actual document that can be called the final project or well permit. Therefore, it would be very helpful if the State permitting process could be further clarified as to what document constitutes the final permit. (B.1)

RESPONSE:

CDOG has a two step permit process. The first step requires the operator of record to submit a complete project plan. A complete project plan includes:

a. an engineering study;

b. a geologic study;

c. an injection plan; and

d. any other data that, in the judgment of CDOG, are pertinent and necessary for the evaluation of the project.

A general description for the contents of a project plan can be found on pages 2 through 4 of the primacy application.

After review of the project plan and if it is approved, a project permit is issued. The permit is in the form of a letter from CDOG to the applicant, approving the project subject to certain general conditions. The standard conditions and examples of additional conditions can be found on pages 4 through 7 of the primacy application.

The second step in the permit process is the filing of a Notice of Intent. Prior to any actual work on an individual well in the approved project, a Notice of Intent must be filed with CDOG for that well. Such notices are required prior to the drilling of a new injection well, the conversion of an existing well into an injection well (even if no work is necessary), or any remedial work to be performed on wells within the area of review. State forms necesary to file these notices can be found on pages C-1, C-2, and C-4 in the appendix to the primacy application.

Actual drilling cannot commence until approval is given by the Supervisor or District Deputy. An example of an approval for actual work on a well can be found on pages C-7 and C-8 in the appendix to the primacy application.

In summary, work on any individual well cannot begin unless there has been an approval of the entire project and an approval of the Notice of Intent for that particular well.

3. COMMENT:

Before a project application is approved the public may be given notice of the proposed action by the State or applicant. The application does state that public notice of the proposed project will be given during the project approval stage (Page 26 of the program description). However, the review team would like the State to briefly describe the information that would be made available to the public regarding a project application to determine the potential effects of the injection project. (R. 1, 2, 3).

RESPONSE:

CDOG will provide public notice of proposed projects during the project plan review period. The complete project plan as well as a representative "Report on Proposed Operations" (page C-7 of the appendix to the primacy application) will be made available for review. The representative "Report on Proposed Operations" shall include:

a. the general provisions applicable to all approvals;

b. the identification of any USDWs and the required minimum casing program to protect them;

c. a description of the injection zone (name, depths, and formation fluid); and

d. a description of the injection fluid (source, expected quality)

If there are any substantial changes to the approved project plan or representative "Report on Proposed Operations," additional public notice will be provided. Examples of substantial changes include:

a. significant increases in injection pressures;

b. changes in injection zone; or

c. significant changes in injection fluids.

The public notice procedures described here have been incorporated into section II.F.1. of the MOA.

In addition to publication in major newspapers of wide circulation in the affected area, public notice will be provided to neighboring oeprators which may be affected.

4. COMMENT:

Section 3203 states that applications must be responded to within 10 days. A commitment in the MOA that the State will not allow a "default issuance" is needed.

RESPONSE:

Agreed. Part II.C. of the MOA has been revised.

5. COMMENT:

The State's enforcement of its program is crucial to the effectiveness of its operation. There are many enforcement tools available to the program Director in order to make a program effective. One of the more common ones for oil and gas wells is pipeline severance or shut-in. In the State's application, page 22, second paragraph, the threat of pipeline severance or closure is mentioned as an effective incentive to protect fresh water. However, there is no citation to the statute or regulation that authorizes the State to do this.

The State should cite its authority to shut-in immediately a well (project), and the purposes and reasons for which it may be done. Cases to support this shut-in or pipeline severance authority should be included. (L.1.)

RESPONSE:

The authority to immediately shut in a well, including associated production activities, is derived from Sections 3013, 3106 and 3224 of

the Public Resources Code (PRC). The ability to shut in a well is reiterated as a condition of both the project plan approval and the Notice of Intent Approval letters. The circumstances and cases where this authority has been exercised are described in Attachment #3.

6. COMMENT:

An approvable State UIC program must have an effective enforcement program. A field inspection program which will require inspection of injection well facilities, and insure witness to various permit actions contribute to such effecters.

The State should explain its use of inspection of wells as a means of enforcing its regulations. The explanation should include the types and numbers of wells which are reviewed and inspected; which wells are required to be tested; and the frequency inspections are performed. (K.1. and pg. 24 of PD)

RESPONSE:

The following table is a summary of CDOG's inspection activities.

Reference	Activity	Required	Discretionary
1723.7(a)	Blow-out prevention equipment		X
1723.7(b)	Oil and gas plug placement		X
	- location; hardness	X	
1723.7(c)	Mudding of hole		X
1723.7(d)(1)	Plug-in open hole placement		X
	- location, hardness	X	
1723.7(d)(2)	Cementing through perforations	X	
1723.7(d)(3)	Cavity Shot:		
	- Shooting		X
	- Placing or location and Hardness of Plug		X
1723.7(e)	Casing shoe plug	X	
1723.7(f)	Casing stub plug	X	
1723.7(g)	Surface plug		
	- emplacement		X
	- location	X	
1724.10(j)	Injection survey		X

In calendar year 1980, the field staff attended 18,191 of 19,205 tests and inspections statewide. A summary of inspection activities for the 1981 calendar year is provided as Attachment #4.

The strength of the enforcement program is in the strength of the inspection program. The sheer number and types of inspections and the continuous review of self monitoring reports (the monthly injection reports described on pages 16 and 17 of the application) enables CDOG to detect many potential problems before they become real problems. The immediate exercise of the ability to shutdown operations at any problem well at the time and place of detection is an extemely effective enforcement tool in light of the inspection program. In the MOA (II.D.1) is a commitment to inspect 100% of the disposal wells each year.

7. COMMENT:

An effective enforcement program has to be very responsive to take action against either willfull or serious violations immediate or expeditious. The formal and final order, and appeal procedures as described on page 21 of the program description seem quite cumbersome and time consuming. A concise explanation of the practical effect of these procedures is needed. (L.1.)

RESPONSE:

When a deficiency or violation is detected, the procedure is to immediately inform the owner or operator of the problem in an attempt for an expeditious resolution. If there is any danger or evidence of damage, the injection is required to cease immediately. This is a standard condition of any project plan or Notice of Intent approval and it can be exercised by the inspector out in the field upon discovery of the problem. The basis for this authority is Sections 3013, 3106 and 3224 of the PRC.

If there is no voluntary compliance, CDOG can issue a formal order to the operator to perform the required work (PRC, 3224). The formal order can be issued in 1 day requiring the operator to immediately cease the injection. A portion of CDOG's procedures manual on orders and legal actions has been provided as Attachment #5.

Within 30 days of the order (or 10 days after affirmance of the order), the owner or operator shall commence, in good faith, the work ordered and must continue until the work is completed. If work has not commenced and continued to completion, the Supervisor shall appoint the necessary agents to enter the premises and perform the work. The amount expended for the work constitutes a lien against real and personal property (PRC, 3226). Enforcement of the lien shall be brought by the State Controller upon request by the Supervisor (PRC, 3356).

Non-compliance with the order is a misdemeanor punishable by a fine of not less than $100 nor more than $500 or by imprisonment for a period not to exceed six months or by both a fine and imprisonment for each such offense (PRC, 3236). Beginning with the issuance date of the order, there is a separate and distinct offense for each day (PRC, 3359) there is failure to do the work ordered.