

US EPA ARCHIVE DOCUMENT

**PUBLIC NOTICE OF INTENT TO ISSUE A
CLASS V EXPERIMENTAL UNDERGROUND INJECTION CONTROL PERMIT
FOR
PACIFIC GAS AND ELECTRIC COMPANY**

Comment period through August 12, 2014

PURPOSE OF PUBLIC NOTICE

The United States Environmental Protection Agency (EPA) is soliciting public comment on its proposal to issue a Class V Experimental Underground Injection Control (UIC) Permit to Pacific Gas and Electric Company (PG&E) to construct and operate one compressed air energy storage (CAES) injection/withdrawal (I/W) test well, known as the PG&E CAES I/W Test Well. The well will be located within Section 27, Township 3 North, Range 5 East, Northwest ¼ at PG&E facilities in the King Island Gas Field, San Joaquin County, near Lodi, California. The project also includes conversion of two existing nearby wells into observation wells: Piacentine 1-27, an existing gas supply well and Piacentine 2-27, an existing core well.

Because wind and solar resources are, by nature, variable (i.e., the sun does not always shine and wind does not always blow when power is actually needed), the addition of these methods of energy generation presents challenges to the operation of the electrical power grid. Energy storage has been identified as an important component of being able to facilitate the use of wind and solar power for energy generation and distribution. CAES has been identified as a key enabling technology for expanding reliance on these renewable resources for electricity production.

If authorized, the test I/W well will be used to inject oxygen-depleted air into a depleted natural gas reservoir within the Mokelumne River Formation (MRF) in the King Island Gas Field for the purpose of building an “air bubble” as part of a 90-day Compression Test. During and after the building of the “air bubble,” a series of injection, shut in, and flow tests will be conducted to investigate the reservoir’s performance for CAES application. Additional monitoring will follow the CAES test for a period of approximately six to nine months to evaluate reservoir pressure behavior in the post-test period. The duration of this authorization would be five years to allow sufficient time for well construction, testing, post-test monitoring, and well plugging and abandonment. The draft permit contains operation, maintenance, monitoring, reporting, and abandonment requirements.

The injection into the depleted gas reservoir sand is expected to occur at depths of approximately 4,680 to 4,720 feet true vertical depth. After completing a thorough technical review of all submitted information, as well as the operational standards, monitoring requirements, and the existing geologic setting, EPA has made a preliminary determination that the activities proposed to be permitted are protective of underground sources of drinking water as required by the Safe Drinking Water Act (SDWA).

EPA has made a preliminary determination to issue a Class V Experimental UIC Permit to PG&E pending this public notice. This action is being taken as provided by Part C of the SDWA and pursuant to Title 40 of the Code of Federal Regulations (CFR) Parts 124, 144, 146, and 147.

PUBLIC COMMENTS

EPA requests public comment on the draft permit and will accept comments in writing through the end of the comment period August 12, 2014. During this period, all written comments on the draft permit should be mailed, faxed, or emailed to Michele Dermer using the contact information listed below. During the comment period, any interested party may request a public hearing on the proposed permit. Any request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. EPA will schedule a hearing only if there is a significant degree of public interest in the draft permit. EPA will provide at least thirty (30) days-notice of any hearing on this matter.

U.S. Environmental Protection Agency, Region 9
Ground Water Office, Mail Code WTR-9
75 Hawthorne Street
San Francisco, CA 94105
Attention: Michele Dermer
Telephone: (415) 972-3417
Email: dermer.michele@epa.gov

EPA's fact sheet and the draft permit, as well as the permit application prepared by PG&E, are available for public inspection online at:

<http://www.epa.gov/region09/water/groundwater/uic-permits.html>

The fact sheet and draft permit may also be found at the location listed below:

Lodi Public Library
201 W. Locust Street
Lodi, CA 95240
Telephone: (209) 333-5566

The fact sheet, draft permit, and permit application may also be found at the location listed below:

U.S. Environmental Protection Agency Environmental Information Center/Library
75 Hawthorne Street
San Francisco, CA 94105
Telephone: (415) 947-4406
Email: library-reg9@epa.gov

FINAL PERMIT DECISION AND APPEALS PROCESS

After the close of the public comment period, EPA will issue a response to comments, a final permit decision, and will notify all commenters regarding this decision. The final decision shall be to either issue or deny the permit. If comments are filed which request a change in the draft

permit, the final decision shall become effective no sooner than thirty (30) days after the service of the notice of decision. Within thirty (30) days after the final permit decision has been issued, any person who filed comments on the draft permit, participated in any public hearing on this matter, may petition the Environmental Appeals Board to review any condition of the permit decision. Commenters are referred to 40 CFR Section 124.19 for procedural requirements of the appeal process. If no comments request a change in the draft permit, the permit shall become effective immediately upon issuance.