



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

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June 30, 2011

Michael Taylor, General Superintendent
Imperial Irrigation District
El Centro Generating Station
485 East Villa Avenue
El Centro, CA 92243

Subject: Imperial Irrigation District IW-1 and IW-3 Drilling Program for Class I Nonhazardous Underground Injection Control Permit No. CA10600002

Dear Mr. Taylor:

This letter is in response to your May 31, 2011 letter transmitting Imperial Irrigation District's proposed drilling program for wells IW-1 and IW-3 at the El Centro Generating Station. We also acknowledge receipt of your proposed drilling schedule by email from you on June 21.

The United States Environmental Protection Agency (EPA) has completed its review of the drilling program. The program is generally adequate, however EPA does have several comments. Please note that it is not necessary to obtain a drilling permit from the California Department of Oil, Gas and Geothermal Resources (DOGGR). EPA has adopted DOGGR's drilling & safety standards as a requirement in our permits.

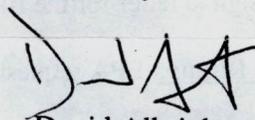
EPA has provided comments based upon the format of the Drilling Program document which is organized by a written topic, numbered section of the topic, and if required, a sub-section small case letter – e.g. *Written Topic Number 1 x*. Please respond in writing to the following comments within two weeks from the date of this letter. A satisfactory electronic response will be sufficient for EPA to authorize drilling, however we also request a follow-up signed letter for the file.

- Drilling Rig Mobilization and Rig-up. EPA requests notification at least twenty-four hours in advance of spudding the well.
- Surface Casing Installation Number 19. The Washington rotating head and annular BOP on the 13-3/8-inch diameter casing should be tested and documented in accordance with DOGGR Regulations, not "EPA and DOGGR guidelines". Include this documentation in the well completion report.
- Long-string Casing Installation Number 23. The program specifies collection of 5 sidewall core samples for laboratory analysis. Please provide a list of the laboratory tests that will be performed on the samples.
- Long-string Casing Installation Number 25. Please follow the EPA Region 9 Temperature Logging Requirements as detailed in Appendix D of your permit.

- Long-string Casing Installation Number 28. The Washington rotating head and annular BOP on the 9-5/8-inch diameter casing should be tested and documented in accordance with DOGGR Regulations, not "EPA and DOGGR guidelines". Include this documentation in the well completion report.
- Completion Liner Installation Number 36. b. EPA believes that the depth range is incorrect as written. Please provide a corrected depth range for installation of the unslotted, 7-inch diameter, 26 lb/foot, L-80 tubing.
- Completion Testing Number 51. The drilling program states the Radioactive Tracer Survey will follow EPA guidelines. The EPA Region 9 Underground Injection Control Program currently does not have such guidelines available. Please submit a proposal with detailed procedures for EPA review and approval. The proposal should address the following items.
 - For Radioactive Tracer (RAT) surveys EPA requires that two RA detectors be run in tandem to allow for volumetric flow measurements, injection zone flow profiling, and logging clock-timed observation for possible vertical flow, etc. We also require that the temperature and RA data be submitted electronically in addition to the hard copy log. The electronic data should show the actual RA tracers and tracking runs; and the actual temperature data in a format that will be of use in a spreadsheet (such as Excel).
 - These logs will be of value in verifying External Mechanical Integrity and additionally, the information will be useful for obtaining formation characteristics including permeability and thickness (actual thickness of injection zone that is taking injection - not the logged/drilled thickness).

When the above items are addressed to EPA's satisfaction, we will provide drilling authorization. Additionally, please notify EPA as soon as possible of any changes in the proposed drilling schedule. Once EPA authorizes the start of drilling please keep EPA closely updated on field status. As discussed in the conference call on June 28 between EPA, IID, and Layne Christensen, EPA will receive electronic copies of the daily drilling reports to the email distribution list EPA provides. If you have any questions regarding this information request, please contact me at (415) 972-3971, or David Stensby of my staff at (415) 972-3246.

Sincerely,



David Albright
Manager, Ground Water Office

cc: Doug Wylie RWQCB
Mike Kratovil DOGGR - Oil and Gas
Cliff Parli DOGGR - Geothermal