



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

Sent Via E-mail

August 8, 2012

Mr. Robert Perdue
Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260

PROPOSED INJECTION OF GROUNDWATER WITH ARSENIC CONCENTRATION ABOVE MAXIMUM CONTAMINANT LEVEL AT PACIFIC GAS AND ELECTRIC COMPANY (PG&E), TOPOCK COMPRESSOR STATION, NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Mr. Perdue:

DTSC appreciates our July 19, 2012 telephone discussion which clarified the Regional Water Quality Control Board's (RWQCB's) interpretation on the limitations with respect to Pacific Gas and Electric Company's (PG&E's) proposal to extract groundwater from Arizona and inject it without treatment into groundwater outside the boundaries of the hexavalent chromium plume as part of the groundwater remedy.

DTSC requested your evaluation on this matter after learning that the proposed groundwater from Arizona to be used as the "fresh water" source will likely contain an arsenic concentration above the Maximum Contaminant Level (MCL) of 10 parts per billion (ppb). Based on our discussion, DTSC understands that the RWQCB's focus is on the receiving groundwater quality at the point of injection. As you explained, the Regional Water Board's Basin Plan has assigned the beneficial use of "MUN" (municipal/domestic supply) for the groundwater in the Topock area. You added that the Basin Plan further requires that groundwaters designated for use as MUN have a Water Quality Objective that incorporates by reference the primary MCLs for inorganic chemicals set forth in Title 22 of the California Code of Regulations. These primary MCLs include the arsenic MCL of 10 ppb.

Because the arsenic concentration of the receiving groundwater at the point of injection is below this MCL of 10 ppb, you made it clear to PG&E that the State Water Board's anti-degradation policy would apply, which is set forth in Resolution 68-16. You

Mr. Robert Perdue

August 8, 2012

Page 2 of 2

explained that this resolution requires that whenever the existing quality of water is better than the quality established in water quality control policies, such existing high quality must be maintained until it has been demonstrated that any change in that water quality will be consistent with maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies.

Since PG&E has reported that the receiving groundwater has an ambient arsenic water quality concentration of less than 10 ppb (possibly even a mean of 5 ppb in the proposed injection well discharge locations based on PG&E data reported), you indicated to PG&E that it would need to treat the source water to a level of 5 ppb of arsenic, unless it were able to justify some degradation up to the Water Quality Objective of 10 ppb in accordance with the anti-degradation policy's requirements. You added that your discussion of the level of arsenic treatment was related to the possible Effluent Limitations that the Regional Water Board would establish in Waste Discharge Requirements (WDRs) for the proposed discharge of the arsenic-laden source water. In conclusion, you indicated to PG&E that it would need to meet a discharge Effluent Limitation of between 5 and 10 ppb for arsenic, and that you would not accept an Effluent Limitation for arsenic above 10 ppb.

Based on your discussions with PG&E, DTSC understands that PG&E will be subject to WDRs, and that the allowable Effluent Concentration of arsenic specified in the WDRs that may be discharged into the injection wells must be at or below the arsenic MCL of 10 ppb, so long as PG&E makes the demonstration required by the anti-degradation policy to justify any degradation of that receiving water quality. DTSC also understands from our discussion that this interpretation has also been communicated to PG&E and that they would be further evaluating their fresh water proposal as a result.

Again, DTSC appreciates your time in providing us with your guidance in this matter and will collaborate with PG&E to ensure that the design of the proposed groundwater remedy will meet all applicable, relevant and appropriate requirements.

Sincerely,



Aaron Yue

Project Manager

Department of Toxic Substances Control

cc: Pamela Innis, DOI
Yvonne Meeks, PG&E
Thomas A. Vandenberg, OCC, SWRCB