To: John.Geroch@conservation.ca.gov[John.Geroch@conservation.ca.gov]
From: Albright, David
Sent: Tue 2/2/2016 8:13:03 PM
Subject: UIC matter

Hi John,

As I noted, this information was submitted through our national tips database. Thanks, David

SUBJECT: Referred to Region - California

FROM:

TO:

Name: Previous Employee

Phone: 403-993-2784

Alleged Violator's Name: California Resources Corporation

Alleged Violator's Address: Suite 800, 111 W Ocean Blvd

Alleged Violator's City: Long Beach

Alleged Violator's State: California

Alleged Violator's Zip: 90802

Tip or Complaint: The company is having to submit Area Of Review (AOR) and UIC packages to be submitted to DOGGR for all oil and gas well bores in Wilmington, Tidelands, Huntington Beach, Ventura and surrounding owned LA properties. DOGGR always needed the AOR's but continued to extend deadlines until the EPA has now said they want these reviews completed. The reason why these reviews are done is because the government (DOGGR and EPA) want to ensure all oil and gas well bores are protecting the Underground Source of Drinking Water (USDW) by cement. And being in California, water is very scarce so this needs to be protected. I know for a fact that there are wells that do not pass the requirements and they are adjusting well bore diagrams to show that the wells are sound, or trying to delay or negotiate wells that can not

pass as they will cost a lot of money to remediate. Also, in the Wilmington and Tidelands fields they are using the BFW (3000 ppm cut off) and not the USDW (10,000 ppm cut off), which should be looked at very carefully. When reviewing well bore diagrams they should be evaluated extremely closely by DOGGR/EPA to ensure the correct ppm is used for the USDW, to ensure all cement calculations are correct and in cubic feet, and to ensure all details are correct. For a fact I know the people recently making the well bore diagrams did not know how to calculate cement, therefore likely not done correctly, and also they were not reading the well files in their entirety so details are missing. There is also reservoir communication between zones in the Huntington Beach field, noted by the water saturations in formations that do not have any significant water. This would be from the Jones formation up to the TM formation (which is not normally wet). If the TM formation is being contaminated by formation water from the Jones, then this could easily and likely reach the USDW depth. The area this is occurring is PRC 91 and some of PRC 392 in Huntington Beach offshore. I also have examples of well bore diagrams that do not pass, and are in this area which is likely causing the communication between the Jones and TM (and therefore even shallower formations and USDW). Again when reviewing the submitted UIC's with the AOR's every detail should be looked at thoroughly and the well bore diagrams are not all correct and things can be easily fudged.

Specific Directions: Ocean Blvd and Pine Ave Long Beach, CA 90802 (Wells Fargo Building) Suite 800

Violation Still Occurring? Yes

State DEP/DEQ/DEM Notified? No

David Albright | Drinking Water Protection Section | EPA Region 9 San Francisco | 415 972-3971