



REGION 4 | LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

Oil and Gas Water Quality Monitoring Program

FREQUENTLY ASKED QUESTIONS

What is the Los Angeles Regional Water Quality Control Board's role in protecting community health and the environment?

The Los Angeles Regional Water Quality Control Board's (Los Angeles Water Board's) Oil and Gas Water Quality Monitoring Program ensures that oil and gas operations within Los Angeles and Ventura counties meet all groundwater and surface water protection regulations. We are committed to informing communities and all stakeholders about water quality issues related to oil and gas production throughout our region. (https://www.waterboards.ca.gov/losangeles/ water issues/programs/Oil and Gas).

What is an Aquifer¹ Exemption?

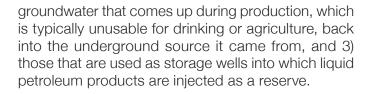
An aquifer exemption allows for the injection of fluids in Class II wells for enhanced oil recovery² or the disposal of oil and gas production water into an aquifer that is not a source of drinking water because it naturally contains petroleum or high levels of other chemicals that make it unsuitable as a source of drinking water. Aquifer exemption applications are jointly reviewed by the California Department of Conservation Geologic Energy Management Division (CalGEM), the United States Environmental Protection Agency (USEPA), and the State Water Resources Control Board (SWRCB). The Los Angeles Water Board ensures that underground sources of drinking water (USDW) and waters with beneficial uses are protected and are not affected by proposed exemptions. The Los Angeles Water Board provides comments to CalGEM, the lead state agency, while the USEPA makes the final determination.

What is the Underground Injection Control Program?

The federal Underground Injection Control (UIC) program was created under the federal Safe Drinking Water Act to protect underground sources of drinking water by regulating the injection of fluids from different industries, including oil and gas production fluids (Class II fluids). CalGEM administers the Class II program in California, where the regulations cover about 55,000 UIC wells. These regulations cover three types of wells: 1) those that inject water or steam for enhanced oil recovery, 2) those that return the

¹ Aquifer: An underground geological formation that contains or can transmit groundwater.

² The Enhanced Oil Recovery (EOR) is an oil and gas extraction method that improves oil and fluid flow within the reservoir and restores formation pressure. EOR uses three techniques: thermal recovery, gas injection, and chemical injection. The main techniques being used in California are waterflooding, thermal recovery (steamflood and cyclic steam) and gas injection.



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What is the relationship between CalGEM and Los Angeles Water Board?

The State Water Resources Control Board (State Water Board or SWRCB) and the nine Regional Water Boards (Regional Boards), including the Los Angeles Regional Water Board, collaborate with CalGEM to address surface and groundwater quality issues associated with oil and gas production. CalGEM oversees oil and gas production activities, which may impact water quality. The Regional Boards provide input to CalGEM on aquifer exemption applications and UIC applications. They help protect water resources and ensure oil and gas operations within their region adhere to all groundwater and surface water protection regulations.

Does an oil operator need a permit from the Los Angeles Water Board for oil and gas operations?

No. A permit will be issued by CalGEM. When CalGEM receives a UIC or well stimulation project application, it is shared with the Los Angeles Water Board for review. The Los Angeles Water Board can object to a project if it concludes that it may harm water quality. If there are no objections, CalGEM will proceed to approve and oversee implementation of the project.

Does the Los Angeles Water Board conduct oil and gas facility inspections?

The Water Boards inspect oil and gas facilities when notified of releases of chemicals or wastes at a site or waste storage pond. If it is determined that the release has impacted water quality, human health, or the environment, the Los Angeles Water Board may direct the responsible operator to assess and remediate the impacts. If an enforcement action is taken against a facility or operator, information can be found on the Los Angeles Water Board's Enforcement website: <u>https://www.waterboards.ca.gov/losangeles/water_issues/programs/</u><u>enforcement/_or_https://www.waterboards.ca.gov/</u><u>losangeles/water_issues/programs/Oil_and_Gas/</u>. Los Angeles Water Board staff are available to assist with this information.

Is an oil or gas operator "fracking" in my community?

No fracking³ has occurred in Los Angeles or Ventura counties since 2015. However, the public can check if a facility is fracking by visiting CalGEM's online database called WellSTAR. WellSTAR provides information about well stimulation treatment permits, well stimulation disclosures, well maintenance data, well records, and UIC projects. The State Water Board also has information on well stimulation here: https://www.waterboards.ca.gov/water issues/programs/ groundwater/sb4/. Los Angeles Water Board staff are available to assist with these documents.

Where can I see the locations of and find information about oil spills?

For most all areas in the state, oil spills that are more than 42 gallons (1 barrel), or any oil spills that threaten or enter a waterway must be reported to the Governor's Office of Emergency Services (Cal OES) at (800) 852-7550. For Cal OES' spills release database visit: (<u>https://w3.calema.ca.gov/operational/malhaz.</u> <u>nsf/\$defaultview</u>). Los Angeles Water Board staff are available to assist with this information.

What chemicals are used in oil and gas operations?

Many chemicals are used in the oil and gas production process. They can be detected in oil, gas, and produced water and include chemicals such as surfactants, scale inhibitors, non-emulsifiers, biocides, clay

³ Fracking is an oil and gas well stimulation technique that typically involves injecting water, sand, and chemicals under high pressure into a bedrock formation via a well. This process creates fractures in the rock and increases the size, extent, and connectivity of existing fractures. It is commonly used in low-permeability rocks like tight sandstone, shale, and some coal beds to increase oil and/or gas flow to a well or to improve underground reservoir permeability (<u>https://www.usgs.gov/mission-areas/water-resources/science/hydraulic-fracturing#faq</u>).





Caption: Los Angeles Water Board Staff/Inspectors Collecting Water Samples

stabilizers, acids, petroleum hydrocarbons, volatile organic compounds, polycyclic aromatic hydrocarbons, formaldehyde, heavy metals, nitrogen oxides, particulate matter, and hydrogen sulfide. In addition, proprietary chemicals may be present. For the list of chemicals that can be found in oil and gas operations, including additives in produced water and hydraulic fracturing fluids, visit: <u>https://www.waterboards.ca.gov/centralvalley/water_issues/oil_fields/</u> <u>food_safety/data/white_paper_task1_report_final.pdf</u>.

Is my drinking water safe?

Water produced during oil and gas production, including produced water that is injected back into the ground, is not a source of drinking water. Drinking water is provided by local water suppliers from local or other sources that are designated as a source of drinking water and must be regularly tested to ensure that it meets state and federal drinking water standards. For information about your local drinking water, visit: <u>https://www.waterboards.ca.gov/drinking_water/programs/</u> or call 916-449-5577.

Who do I call if I smell foul odors from an oil well or facility in my community?

If the well or facility is located in Los Angeles County, contact the South Coast Air Quality Management District (SCAQMD) at (800) 288-7664 or go to: <u>http://www.aqmd.gov/home/air-quality/complaints/smoke-dust-odor</u> to file a complaint.

For Ventura County, contact the Ventura County Air Pollution Control District (VCAPCD) at (805) 303-4005 or visit: <u>http://www.vcapcd.org/about.htm</u>.

How do oil and gas facilities impact fish and wildlife?

For information about impacts to fish and wildlife from oil and gas operations, contact: Mike Fris with the U.S. Fish and Wildlife Service at 916-414-6464 or visit: <u>https://</u> <u>fws.gov/program/oil-gas-and-mineral-management/</u> <u>what-we-do</u>.

For water quality questions or concerns, or for information about the Los Angeles Water Board's Oil and Gas Monitoring Program, contact:

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With over 10 million residents, the Los Angeles Water Board regulates the most densely populated region in the state, including the coastal watersheds of Los Angeles and Ventura Counties and small portions of Kern and Santa Barbara Counties.

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

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