

WATER DEEPLY

Protecting Aquifers From Oil Industry Pollution



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Residents near San Luis Obispo County's Price Canyon are concerned the Environmental Protection Agency will approve an aquifer exemption application allowing oil companies to dispose of wastewater in aquifers. This may be one of dozens of aquifers at risk from potential pollution

If there's a bright side to California's five-year struggle with drought, it's that most of us have learned to be much more careful with water. We've shortened our showers, installed rain barrels and low-flow faucets and let green lawns turn brown.

And conservation is still critical. Even as El Niño rains fall, water managers caution that a few weeks of wet weather won't replenish aquifers diminished by half a decade of desperately dry conditions.

But some state officials, it seems, haven't grasped how important it is to protect our thirsty state's water sources. Incredibly, they are moving to sacrifice dozens of underground supplies across California to the oil industry for waste fluid disposal and other operations.

First in the crosshairs is an aquifer in San Luis Obispo County's Price Canyon area. Officials with the state's Division of Oil, Gas and Geothermal Resources recently asked the U.S.



A farmworker ties almond tree branches with string as a pumpjack operates nearby, Friday, Jan. 16, 2015, in Shafter, Calif. California regulators authorized oil companies more than 2,500 times to inject wastewater and other production-related fluids into federally protected aquifers potentially suitable for drinking and watering crops in the nation's agricultural center, state records show. (Jae C. Hong. Associated Press)

Environmental Protection Agency (EPA) to strip protections for this aquifer by exempting it from the federal Safe Drinking Water Act.

If the EPA approves the state's dangerous "aquifer exemption application," the oil industry would get a green light to dump oil-waste fluid into this underground water via injection wells in the Arroyo Grande Oil Field. That would be a boon to Freeport-McMoRan, which plans to drill hundreds of new oil wells in the area.

But those of us living near this aquifer are deeply concerned. We fear that oil pollution could contaminate some of the 100-odd water supply wells within a mile of where the oil industry plans to drill.

Oil wastewater, after all, is dirty, dangerous stuff. It commonly contains cancer-causing chemicals such as benzene, according to testing by the state and oil companies themselves of well flowback fluid and wastewater from across California.

And there's a lot of this toxic fluid to dispose of: In California, oil companies commonly pull up as many as 15 barrels of waste fluid for every one barrel of oil.

Such risks didn't deter the oil regulators, who pushed forward with the aquifer application in February. Unfortunately, that foolhardy move is all too consistent with the oil division's appalling track record of failing to protect Californians' air and water.

This same agency just made headlines for failing to prevent the largest methane leak in U.S. history. The leaking gas-storage well near L.A.'s Porter Ranch neighborhood drove thousands of people from their homes. And the leak might have been prevented if state oil officials hadn't given the well operator permission not to replace a crucial subsurface safety valve.

With respect to water pollution, the failures are also glaring. Oil regulators admitted last year to allowing the oil industry to drill thousands of injection wells into legally protected groundwater aquifers across the state – including the Arroyo Grande aquifer.

Such failures help to explain our skepticism of oil officials' claims about why they support exempting the Price Canyon-area aquifer from the Safe Drinking Water Act.

The oil agency argues, for example, that the formation is already polluted and sealed off from other water supplies. Yet hydrogeologist Matt Hagemann says officials have failed to provide data to support such sweeping assertions.

“The claim that boundary conditions create an impermeable hydraulic barrier that would preclude the intercommunication of drinking water aquifers with oil field activities is unsubstantiated by any physical tests or computer simulations,” Hagemann wrote in an analysis for our organization.

Regulators have also failed to adequately map nearby water wells. And, shockingly, different maps shown to the public by the state actually show different aquifer boundaries.

Officials, in other words, can't even map this aquifer consistently – let alone justify turning it into a garbage dump for oil waste.

Yet disturbingly, this “aquifer exemption application” from the Division of Oil, Gas and Geothermal Resources could be the first of dozens across the state – all to serve the oil industry.

Now the federal government has a huge decision to make. Following the EPA's failure to protect the people of Flint, Michigan, from contaminated water, agency officials must decide the fate of underground water in California.

The EPA must reject this aquifer exemption application. Our drought-challenged state just can't afford to turn our precious groundwater over to the oil industry.