Environmental group pushes to close oil wastewater sumps

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In the latest salvo targeting California's petroleum industry, an environmental activist group called Tuesday for a statewide ban on the practice of using unlined sumps to dispose of water that comes up from the ground along with crude oil.

Clean Water Action detailed its case against sumps, sometimes called "surface impoundments," in a 31-page report alleging such facilities in Kern County have for decades operated with minimal, or in some cases no, oversight.

The Washington, D.C.-based nonprofit claims the practice threatens groundwater and air quality as "produced water" piped from nearby oil fields is diverted into more than 400 Central Valley sumps. The salty fluid, which sometimes contains carcinogens, then evaporates and gradually seeps into the ground.

During a phone conference discussing the report's findings, the group's California oil and gas program manager, Andrew Grinberg, said the state's petroleum industry needs to find a better way to deal with its wastewater.

"We don't see a good answer for what to do with oil wastewater," he said. "We think that the industry should be proactive and make sure it can do it safely before they dispose of it at all."

Sumps represent one of a few methods for handling the produced water whose volume far exceeds the accompanying crude coming from California oil wells.

Other disposal techniques include treating and reusing the fluid for well stimulation, or diluting it with fresh water for use in irrigation.

Both processes can be expensive and impractical for small oil producers.

The most popular alternative to sumps is the use of injection wells that pump produced water deep underground. These facilities face an uncertain future in California because of recent federal and state scrutiny; nearly a dozen have been idled in Kern since early July.

Clean Water Action said the Central Valley Regional Water Quality Control Board, the agency primarily responsible for regulating sumps, has found evidence that a "plume" of high salinity and boron contamination that originated in a surface impoundment is slowly migrating toward the Kern River flood channel.

A board official rejected the idea of a ban on sumps in an email Tuesday. Such facilities pose different risks based on the quality of water being discharged, the quality of the underlying groundwater and the types of soil present at the site, he said.

"There are areas where these ponds, based on their site-specific conditions, can comply with our laws, policies and regulations," wrote Doug Patteson, a supervising water resource control engineer with the agency.

Board staff are putting together an inventory of unlined sumps in the valley and monitoring them, he wrote, adding that facilities that cannot be permitted face enforcement action.

Oil industry representative Rock Zierman, president and CEO of the California Independent Petroleum Association, wrote in an email that adequate rules are already in place to regulate sumps.

Oil producers must obtain discharge permits before disposing of produced water, he noted, and sumps are subject to inspection.

The director of the San Joaquin Valley Air Pollution Control District, Seyed Sadredin, said the agency has for decades regulated emissions from sumps through a variety of rules, including one that limits their release of volatile organic compounds.

He wrote an email saying sumps are "not significant contributors to the (Central) Valley's ozone concentrations," and that such facilities "are subject to some of the most stringent requirements in the state."

Legislation set to take effect in January will impose new disclosure requirements on California sump owners but will not force any operational changes.

Clean Water Action's report is available online at cleanwateraction.org/publication/pits.