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CALIFORNIA:
Green group reveals offshore fracking chemicals, says many pose hazards

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Unconventional oil drilling in the waters off Southern California uses several chemicals considered hazardous, including at least one that a federal agency connects to increased cancer risk, an environmental group said yesterday.

The Center for Biological Diversity (CBD) in a 28-page letter asked the California Coastal Commission to block offshore hydraulic fracturing, or fracking, and cited a list of potential perils.

The green group identified chemicals used in offshore operations after looking at oil and natural gas company disclosures on FracFocus.org.

"The fracking chemicals known to be used in California state waters are alarming," Emily Jeffers, Center for Biological Diversity's staff attorney, Oceans Program, wrote in the letter. "The Center's analysis of chemicals used in 12 wells and disclosed by the voluntary reporting site FracFocus reveals that almost all of the chemicals used are suspected of causing gastrointestinal, respiratory, and liver hazards, as well as skin, eye, and sensory organ risks.

"More than half of the chemicals are suspected of being hazardous to the kidneys, immune and cardiovascular systems, and more than one-third are suspected of affecting the developmental and nervous systems," the letter added. "Between one-third and one-half of the chemicals used are suspected ecological hazards."

The green group said that the California Coastal Commission should use its authority to prohibit fracking in waters off the Golden State because it threatens coastal resources.

The commission has not had the chance to review the letter that arrived yesterday, said Sarah Christie, the agency's legislative director.

"The Commission staff is in the process of evaluating all of the available information on offshore fracking, and will be discussing the topic, as well as our role in the regulatory process, when the Commission meets next month in San Francisco," Christie said in an email. "The Commission is committed to protecting coast and ocean resources consistent with its mandate and authority in the Coastal Act and the Coastal Zone Management Act."

The commission had already planned to talk about offshore oil drilling at its meeting next month, Christie said. It's a follow-up to a meeting in August, when the agency launched an investigation into how much hydraulic fracturing is happening offshore and what power the commission has to control it.

That followed a news report that regulators have allowed drilling using fracking in the Pacific Ocean at least a dozen times since the late 1990s. The Associated Press unearthed the data through a Freedom of Information Act request.

At that August meeting, Alison Dettmer, chief deputy head of the commission's Energy and Ocean Resources division, said the agency lacks key data related to fracking, in which companies blast water laced with sand and chemicals at high pressure to break apart rock formations and release oil or natural gas.

In waters controlled by the federal government, there are 23 platforms with outer continental shelf (OCS) plans granting approval for exploration. Thirteen of those were authorized by the Coastal Commission, Dettmer said in August. Of those, a dozen "have done some form of fracking in the last 25 years," she said. In addition, it has been approved for Platform Gilda off Santa Barbara.

Dettmer will review the CBD letter before next month's meeting, Christie said.

Oil and natural gas industry trade group Western States Petroleum Association did not respond to inquiries about the CBD letter and claims on chemicals used.

Chemicals listed as hazardous

The Center for Biological Diversity in its letter said many of the dozen wells where fracking is underway use chemicals with risks.

The green group lists seven chemicals that it said are most commonly used in offshore wells. It said there are known health risks with those compounds.

The ones listed include crystalline silica or X-Cide, which CBD's letter said is "classified as a hazardous substance under both the Occupational Safety and Health Act (OSHA) and the Comprehensive Environmental Response, Cleanup, and Liability Act (CERCLA, or Superfund)."

The chemical is "harmful to skin, eyes and other sensory organs, respiratory system, immune system and kidneys; mutagen. Known human carcinogen," the letter said. CBD drew that information from the Endocrine Disruption Exchange Inc., or TEDX, which describes itself as an organization "that focuses primarily on the human health and environmental problems caused by low-dose and/or ambient exposure to chemicals that interfere with development and function, called endocrine disruptors."

OSHA has issued a hazard alert on respirable crystalline silica, which said that "hydraulic fracturing sand contains up to 99 percent silica. Breathing silica can cause silicosis. Silicosis is a lung disease where lung tissue around trapped silica particles reacts, causing inflammation and scarring and reducing the lungs' ability to take in oxygen."

The alert, which addresses the issue of worker exposures only, added that "workers who breathe silica day after day are at greater risk of developing silicosis. Silica can also cause lung cancer and has been linked to other diseases, such as tuberculosis, chronic obstructive pulmonary disease, and kidney and autoimmune disease."

CBD's letter also said offshore wells use methanol, which the green group quoted TEDX as saying is "harmful to skin, eyes and other sensory organs, respiratory system, gastrointestinal system and liver, brain and nervous system, immune system, kidneys, reproductive and cardiovascular system; mutagen."

The letter also named glyoxal, sodium tetraborate, 2-butoxyethanol, methyl-4-isothiazolin and ethoxylated nonylphenol as chemicals used in the offshore wells.

"The chemicals used in the fracking process are extremely dangerous, but the fate of their ultimate disposal is of even greater concern," the letter said. "Releases of fracking fluids onshore have led to fish kills in freshwater bodies. Spilling or leaking of fracking fluids, flowback, or produced water is also a huge problem. Spills can occur at the surface, and there is a risk of underground migration of fluids. Also, many fluids must be transported to and/or from the well, presenting additional opportunities for spills."