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California Coastal Commission Urged to Ban Fracking State Waters

by Jacob Shea / December 3, 2013

Oil drillers using hazardous chemicals, pumping wastewater into coastal waters, shows new analysis

We now know that hydraulic fracturing has already been underway in state and federal waters off California's coast for more than two decades. Recent media reports have revealed that federal regulators have permitted fracking in the Pacific Ocean at least 12 times since the late 1990s, and have granted four fracking permits off the marine-life rich Santa Barbara coast without environmental review.

Now pressure is mounting on the California Coastal Commission to curb fracking in the high seas. Last month, the Center for Biological Diversity (CBD) wrote a 29-page letter to the commission, saying that hazardous fracking chemicals were being released into the costal waters and urging the state body to ban fracking for oil and gas in state waters. The letter asked the commission to press for tighter regulation on offshore fracking in federal waters as well.

The CBD letter includes an analysis of chemicals used in 12 offshore wells in state waters near Long Beach, which found numerous substances tied to human health problems and ecological hazards. The analysis is based on data disclosed by oil companies and obtained via Freedom of Information Act requests. "Oil companies are fracking California's beautiful coastal waters with dangerous chemicals, and federal officials seem barely aware of the dangers," CBD's Oceans Program Director Miyoko Sakashita said in a statement. "We need an immediate halt to offshore fracking before chemical pollution or an oil spill poisons the whales and other wildlife that depend on California's rich coastal waters."

"Slick water", as it has come to be known, contains hundreds of chemicals known to be toxic or carcinogenic. The fracking industry thus far successfully barred requirements for disclosure about what substances are in chemical mixtures, citing trade secrets as the primary justification. Various studies have found toxic chemicals used in hydraulic fracturing such as, but not limited to, benzene, arsenic, lead, chloride, sulfites, hexavalent chromium, and boron. The CBD report found that at least one-third of chemicals used in the offshore drilling operations are suspected to have negative ecological impacts, and over one-third are suspected to damage human developmental and nervous systems.

As acknowledged by the Coastal Commission, roughly half of the platforms in the Santa Barbra Channel discharge all, or most, waste fluid into the ocean. Fluid not released into the ocean is transported to underground reservoirs, running the risk of contaminating groundwater. Chemicals used in offshore fracking are exempt from federal clean water laws, which means companies can dump the noxious fluid into the ocean without filing environmental impact reports or assessment.

Seven Harmful Chemicals used in 12 California Offshore Wells

Chemical
Number of Wells Used
Known Health Effects20

Crystalline Silica (X-Cide)
All 12 wells
Harmful to skin, eyes and other sensory organs, respiratory system, immune system and kidneys; mutagen. Known human carcinogen.21

Methanol
All 12 wells
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, developmental inhibitor and endocrine disruptor. Ecological risks.

Glyoxal
11 wells
Harmful to skin, eyes and other sensory organs, respiratory and reproductive system, gastrointestinal system and liver, brain and nervous system, immune system, cardiovascular system and blood, endocrine disruptor; mutagen, promoter of cancer. Ecological risks.

Sodium Tetraborate
All 12 wells
Harmful to skin, eyes and other sensory organs, respiratory system, gastrointestinal system and liver, brain and nervous system, kidneys, cardiovascular system. Ecological risks.

2-Butoxyethanol
3 wells
Harmful to skin, eyes and other sensory organs, respiratory system, gastrointestinal system and liver, brain and nervous system, immune system, kidneys, reproductive system and cardiovascular system; mutagen, developmental inhibitor and endocrine disruptor; linked to liver cancer. Also linked to adrenal tumors. Ecological risks.22

Merhyl-4-isothiazolin
All 12 wells
Harmful to skin, eyes and other sensory organs, respiratory, reproductive system, brain and nervous system, immune system; mutagen; developmental inhibitor. Ecological risks.

Ethoxylated nonylphenol
9 wells
Harmful to skin, eyes and other sensory organs, respiratory system, gastrointestinal system and liver, immune system, reproductive and cardiovascular system; developmental inhibitor and endocrine disruptor.

Furthermore, studies dealing with fracking discharge and the environmental impacts associated with the practice are lacking. As demand and production for natural gas is projected to increase, these operations are only expected to become more frequent. “This is a significant data gap, and we need to know what the impacts are before offshore fracking becomes widespread,” Samantha Joye, a marine scientist at the University of Georgia studying oil spills in marine environment, told the Associated Press.

Along the California coast, a practice has become commonplace to use fracking tactics on standing petroleum extraction platforms. Since the late 1990's, the federal Bureau of Safety and Environmental Enforcement has approved permits on 15 already existing leases to develop natural gas on federal lands in the Pacific Ocean. One such former oil extraction platform, creatively dubbed Platform A, is perhaps remembered for its roll in the disastrous 1969 oil spill off Santa Barbara.

Federal documents reveal that oil companies used fracking methods at least 203 times in the California coastal area since the late 1990s. However, since the disclosure of hydraulic fracturing operations is voluntary, its likely that this figure doesn't reflect the actual number of times the controversial drilling method has been used.

Pressure to regulate offshore fracking is coming from legilsators too. On November 19, Representative Lois Capps (D-Ca) called for a suspension of offshore fracking pending a thorough study on coastal hydraulic fracturing's impacts on human health and the environment.

"This inadequate oversight is very troubling," Capps stated in a letter to the Department of the Interior and EPA. "There is a great deal we do not yet know about the environmental and public health impacts of fracking onshore, let alone offshore."

Given the unique ecology of the Pacific Coast, the environmental risks from leakage and dumping could impact marine mammals, seabirds, turtles, invertebrates, and nearly 500 fish species that inhabit these waters.

Many endangered species – including black abalones, western snowy plovers, humpback and blue whales, and leatherback sea turtles, that also live or or pass through areas where fracking is underway – are at risk from these operations.

The California Coastal Commission is mandated to protect costal water from pollution under the California Coastal Act. California's coastal regulators claim they were only recently made aware of these offshore fracking operations. The commission has acknowledged the need for further investigation into fracking's impacts. "It wasn't on our radar before, and now it is," Alison Dettmer, commission deputy director told the media recently