## Bloomberg Businessweek

## California Assembly Passes New Regulations on Fracking

By Mark Melnicoe Sep 11, 2013

California lawmakers weighing the prospects of the largest shale-oil reserves in the U.S. gave final approval to regulations for state oversight of the extraction technique known as hydraulic fracturing.

The third-largest oil-producing state would for the first time require permits for drillers who use the method of forcing water, sand and chemicals underground to break up rock formations. Energy companies would also have to disclose the fracking fluid ingredients and notify nearby landowners.

Technological advancements in fracking have ignited a boom in development of wells once deemed uneconomical, particularly shale oil. California's Monterey Shale may hold 15.4 billion barrels -- two-thirds of the nation's shale-oil reserves, according to federal estimates.

"There are still many unanswered questions," said the bill's author, Senator Fran Pavley, a Democrat from Agoura Hills near Los Angeles. "It is in the interest of all Californians to monitor and regulate these practices."

The regulations, which won final passage today in the Assembly and the Senate, now go to Governor Jerry Brown, a 75-year-old Democrat. Evan Westrup, a spokesman for the governor, said Brown intends to sign the bill into law.

The measure "comprehensively addresses potential impacts from fracking, including water and air quality, seismic activity and other potential risks," Westrup said.

## **Watered Down**

The Natural Resources Defense Council, California League of Conservation Voters, Clean Water Action and Environmental Working Group, which backed earlier versions of the measure, withdrew their support, saying the bill was too watered down.

"This bill will not protect Californians from the enormous threats of fracking

pollution," said Kassie Siegel, senior counsel of the Center for Biological Diversity's Climate Law Institute. "Fracking poses unacceptable risks to the air we breathe, the water we drink and our climate."

The measure would require a study of potential air and water pollution and public health threats posed by fracking and other "enhanced extraction" methods including the use of acid to dissolve rock.

Lawmakers turned down proposals to suspend fracking until more is known and to require detailed disclosure of the chemicals used in fracking.

## **60 Years**

Oil companies have safely used fracking in California for more than 60 years, according to the Western States Petroleum Association, a Sacramento-based industry group.

"Most of the oil that we're going after is a mile and a half below the surface, even though the water table is only 500 feet," said Assemblyman Tim

Donnelly, a Republican from Twin Peaks. "All that really matters is that well casing holds up, and in 60 years we haven't had a single one fail."

California's 1,750-square-mile (4,530-square-kilometer) Monterey Shale formation, threading lengthwise through the San Joaquin Valley southeast of San Francisco, in the center of the state, may hold the largest deep-shale oil reserves in the world, the U.S. Energy Department estimates.

The 15.4 billion barrels would be enough to supply the U.S. for more than two years, the agency has said.

Development of the deposits could mean 512,000 to 2.8 million jobs by 2020, and add \$4.5 billion to \$24.6 billion to state and local tax revenue in that period, according to a March report by the University of Southern California, in Los Angeles. USC said the research, partially funded by Western States Petroleum, was conducted by an independent team.