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# MOTION

Hydraulic fracturing (also known as "fracking") is an oil and natural gas extraction process that involves the very highly-pressurized injection of hydraulic fracturing fluids containing a mixture of water, sand and unreported amounts of unknown chemicals into underground geologic formations in order to fracture the rock, thereby increasing flows to and furthering the production of oil or gas from a well. Other unconventional highly-pressurized extraction processes called "acidizing" and "gravel packing" involve similar techniques.

In total, fracking, acidizing, gravel packing and other associated well-stimulation practices threaten to contaminate drinking water supplies, cost taxpayers in Los Angeles hundreds of millions of dollars, release potent and dangerous greenhouse gases into the atmosphere and cause earthquakes.

## CONTAMINATED DRINKING WATER

After being injected into the ground, the chemicals used in the fracking process may leach into groundwater supplies, contaminating drinking water for local residents. In fact, there have been more than 1,000 documented cases of water contamination next to fracking sites, as well as cases of sensory, respiratory, and neurological damage due to ingested contaminated water in communities throughout the United States.

Fracking, acidizing and gravel packing of oil and gas wells are unregulated and are spurring oil and gas extraction and exploration in California and other states, including within the City of Los Angeles. Additionally, fracking is used in the Colorado River and State Water Project watersheds, as well as near local Southern California groundwater aquifers, utilizing large volumes of water, which competes for and jeopardizes regional, state, and water supplies needed by the people of Los Angeles.

The Department of Water & Power (DWP) has stated that, because the well operators are not required to disclose the chemicals used in fracking, other operations and injections, it therefore does not know all the chemicals for which DWP should be testing the City's water supplies.

Groundwater banking and storage is a critical alternative to building new surface reservoirs and plays an essential role in moving the City of Los Angeles toward greater self-reliance on local water resources. It is critical to the future of Los Angeles that groundwater supplies remain safe.

## A FINANCIAL LIABILITY FOR TAXPAYERS

Protecting the City's water supply resources from contamination is a financial necessity for Los Angeles, as treatment of contaminated groundwater resources after the fact is costly and identification of potential responsible parties to determine financial liability is not always possible, particularly in regards to unregulated activities such as fracking, acidizing, gravel packing and

related wastewater disposal. The DWP has announced plans to build the world's largest groundwater treatment center over one of the largest Superfund pollution sites in the United States: the San Fernando Basin. Two plants, costing a combined $600 million to $800 million, will restore groundwater pumping of drinking water from scores of San Fernando Valley wells that the DWP began closing in the 1980s and ensure that other wells remain productive while curtailing the pollution plumes steadily migrating in their direction. Additional measures to address and treat water supplies potentially contaminated by fracking chemicals pose a tremendous financial liability for taxpayers in Los Angeles.

Allowing activities like hydraulic fracturing, acidizing and gravel packing, which threaten to contaminate the City's imported and local groundwater supplies, is inherently dangerous to the long-term safety, health, security and reliability of Los Angeles' water supplies.

## UNDERMINING WORK TO ADDRESS THE CLIMATE CRISIS

Higher emissions generated by producing, refining and burning unconventional-produced oil and gas, and drilling and fracking for tight oil and gas can result in massive release of unregulated emissions of methane, a potent greenhouse gas often associated underground with oil.

The California Public Resources Code states that "methane gas hazards…are a clear and present threat to public health and safety" and that "due to the cost and complexity of methane hazard mitigations, property owners and local governments are often unable to mitigate these hazards." These provisions are of grave import to Los Angeles County and City, as Exploration and Production activities has caused and is causing massive releases of methane and hydrogen sulfide gases into communities and the atmosphere.

Fracking in California can also thereby seriously undermine the State's efforts to address the climate crisis by reducing greenhouse gas emissions to 1990 levels by 2020. Unregulated and unchecked fracking must not be allowed to offset the air quality benefits of natural gas used in certain applications.

## INCREASED EARTHQUAKE RISKS

Further, all high-pressure fracking and injection creates "seismic events," but not all are felt as earthquakes. The United States Geological Study (USGS) reports that the number of noticeable earthquakes (greater than a 3.0 Richter magnitude) has increased dramatically over the past few years within the central and eastern United States. More than 300 earthquakes above a Richter magnitude 3.0 occurred in the three years from 2010-2012, compared with an average rate of 21 events per year observed from 1967-2000. USGS scientists have also found that at some locations the increase in seismicity coincides with the injection of wastewater into deep disposal wells.

The USGS has determined that fracking wastewater disposal is responsible for triggering earthquakes in Oklahoma, Arkansas and Ohio, among other states. A magnitude 2.1 earthquake matching the description of micro earthquakes caused by fracking wastewater disposal occurred in the Baldwin Hills on August 27, 2013, at a magnitude and depth compatible to stated USGS concerns about earthquakes induced by fracking.

Much of the State of California and the City, in particular, is located on top of fault lines within one of the most active and potentially dangerous earthquake zones in the United States.

**COMPREHENSIVE STUDY NEEDED**

The Los Angeles Municipal Code, Section 13.01, allows the City to regulate through its land use process various activities related to oil and gas drilling and production.

The City's land use regulations for oil and gas exploration, extraction, and related operations and activities are in need of comprehensive review to determine whether the existing zoning and land use regulations of oil and gas exploration, extraction, and related operations and activities are sufficient to assure public health, safety, environmental quality, and welfare; or whether additional regulations are necessary to address the impacts of oil and gas exploration, extraction, and related operations and activities, including, but not limited to: hydraulic fracturing, acidizing, gravel packing, and related wastewater disposal.

If land use applications, permit applications, or any other applications requesting approval to conduct oil and gas exploration, extraction, production and related operations and activities within the City limits are granted prior to the City examining the impact of such activities and taking all steps necessary to protect public health, safety, and welfare, irreparable harm may be done to the public health, safety, and welfare.

**WE THEREFORE MOVE** that the City Attorney, with the assistance of the Planning and other relevant departments, be requested to prepare and present an ordinance to change the zoning code to prohibit all activity associated with well stimulation, including, but not limited to, hydraulic fracturing, gravel packing, and acidizing, or any combination thereof, and the use of waste disposal injection wells in the City of Los Angeles, with such a prohibition to remain effective until:

- the City Council is assured that companies conducting fracking within the City of Los Angeles, or in areas providing drinking water to the City, can mitigate the effects on climate change, protect environmental quality and natural resources, promote community awareness, allow government access to and testing of chemicals used, anticipate and include related older and emerging extraction technologies such as hydraulic fracturing, acidizing, gravel packing and all wastewater disposal, and require full disclosure and testing of sites, with adequate time for public input;

- the City Council is assured of the long-term safety, security and reliability of current and future Los Angeles water supplies, the overall health and safety of the people of Los Angeles and the safety of their property from seismic or subsidence concerns related to the exploration and production of oil, natural gas, or other hydrocarbons, and the maintenance of environmental quality;

- state and federal legislation and regulations are put in place that include protections from the adverse effects of hydraulic fracturing, gravel packing, acidizing, wastewater disposal and related activities, consistent with the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act.

PRESENTED BY _____ _____

PAUL KORETZ
Councilmember, 5th District

MIKE BONIN
Councilmember, 11th District

SECONDED BY _____

ORIGINAL

SEP 4 2013